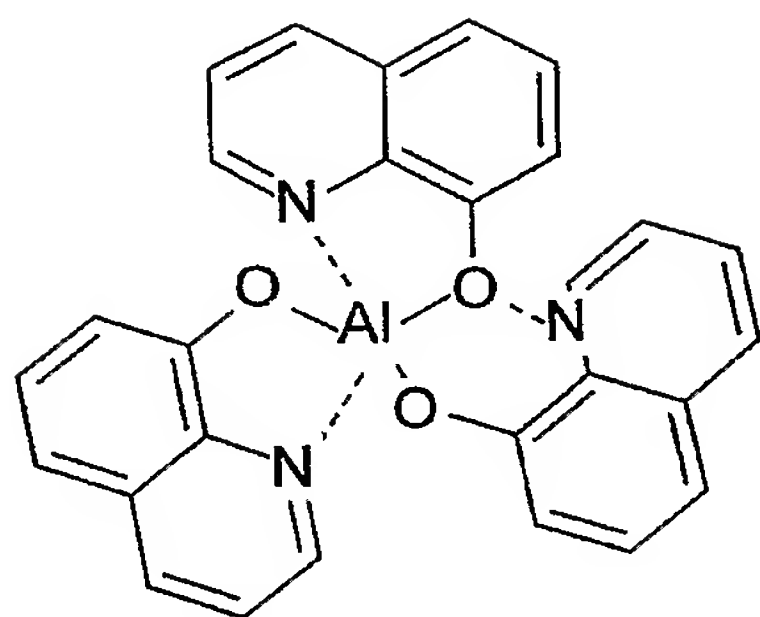
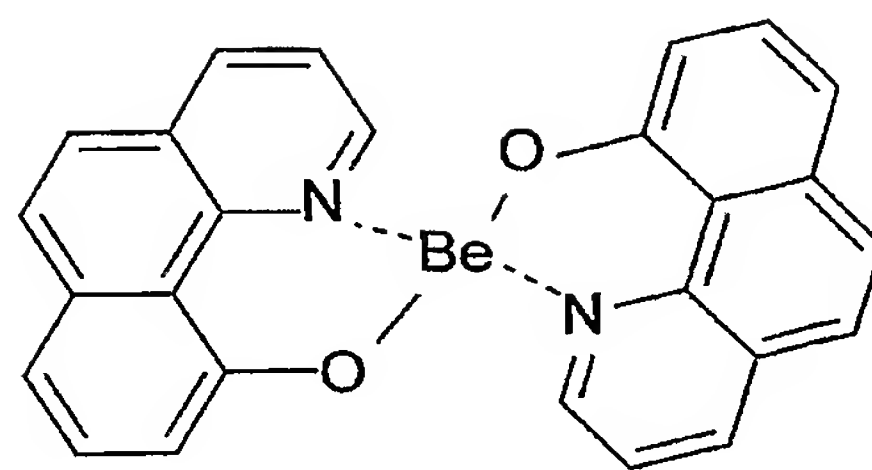


Fig. 1

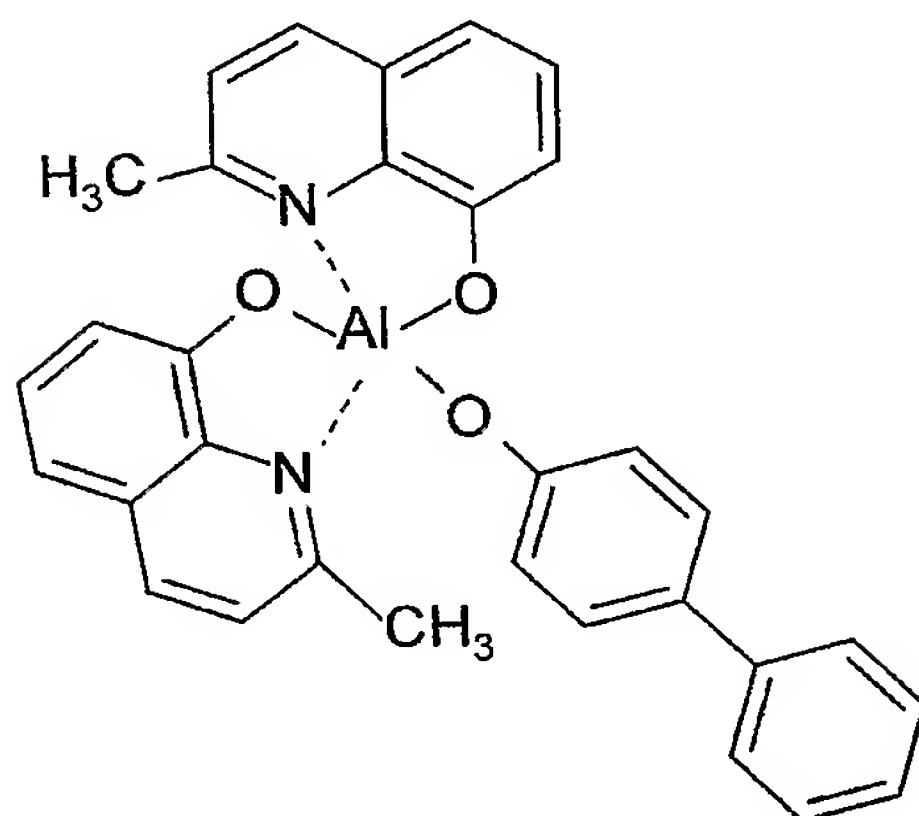
2/26



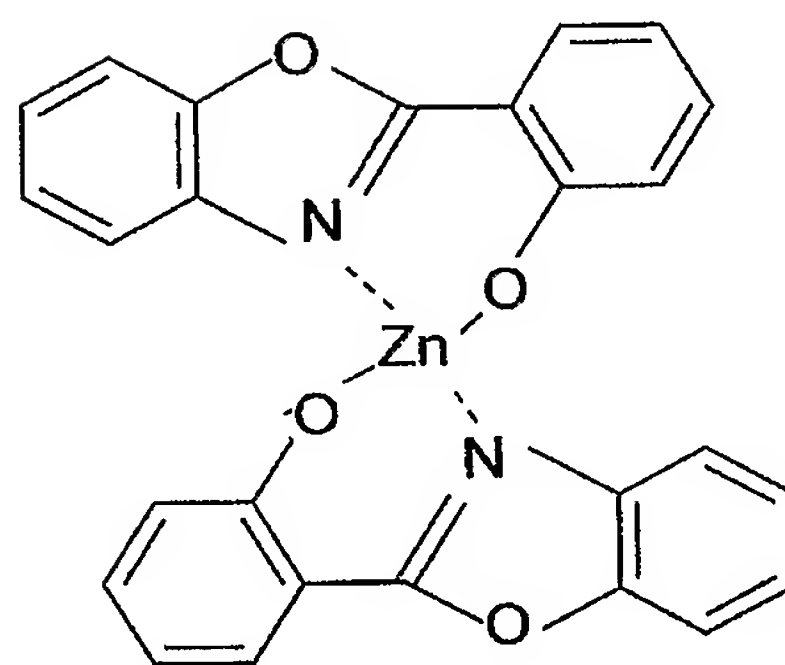
Alq



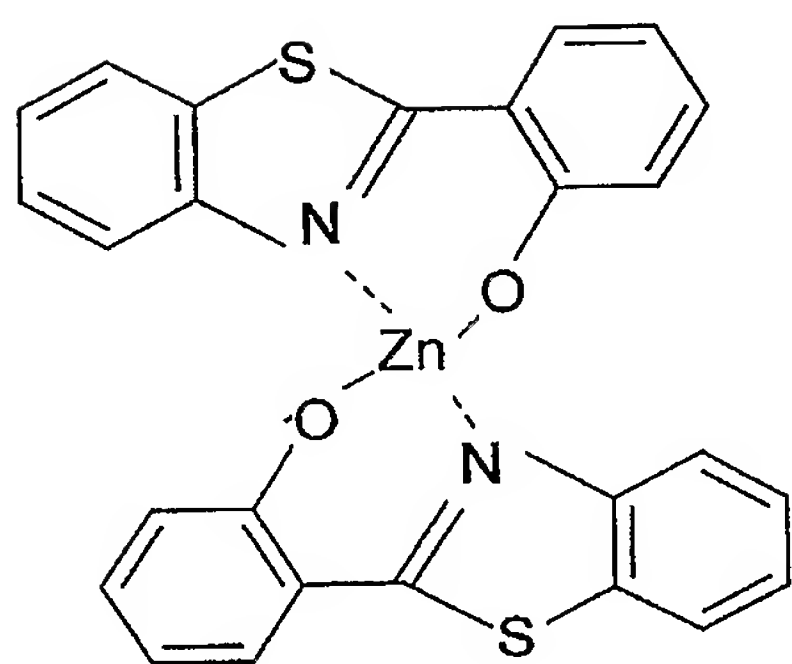
Beq



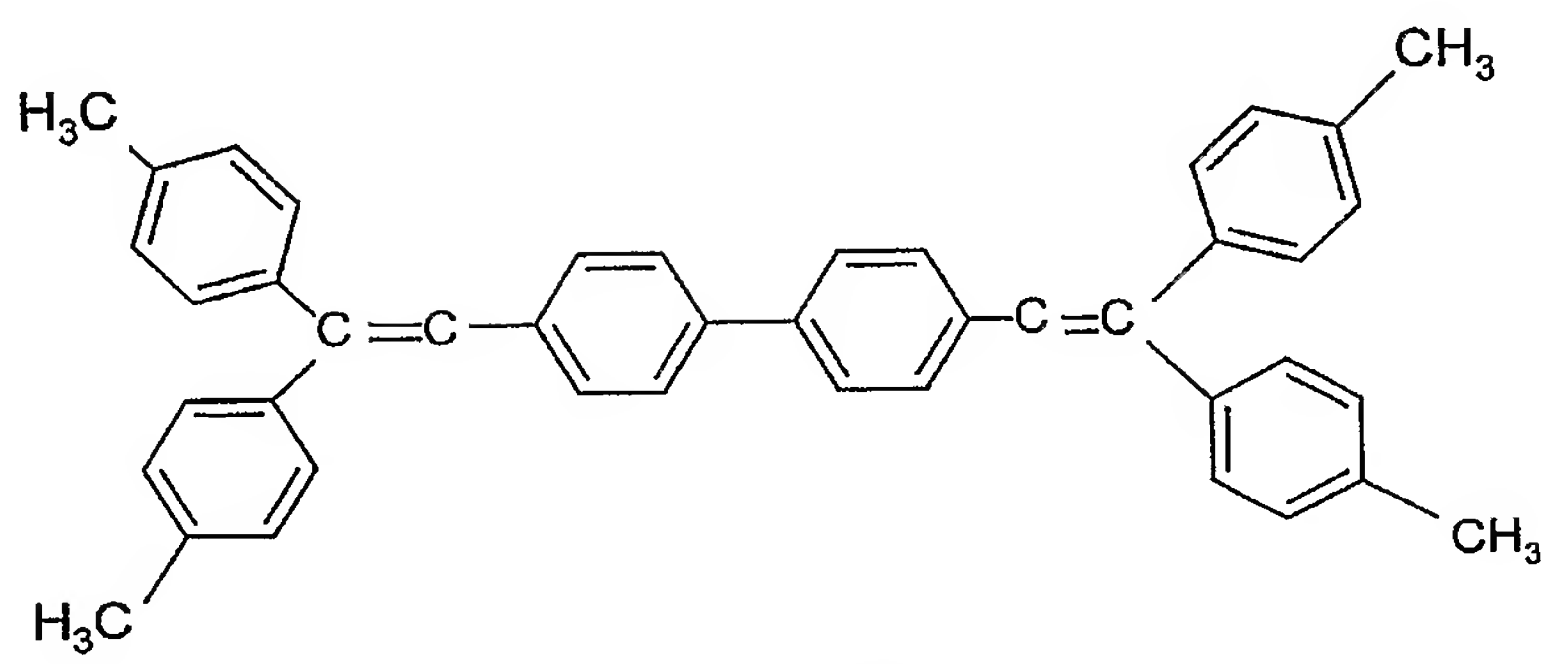
BAlq1



ZnPBO



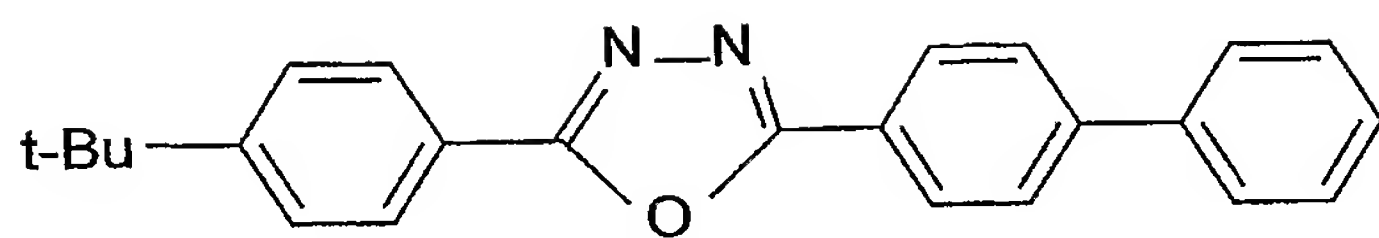
ZnPBT



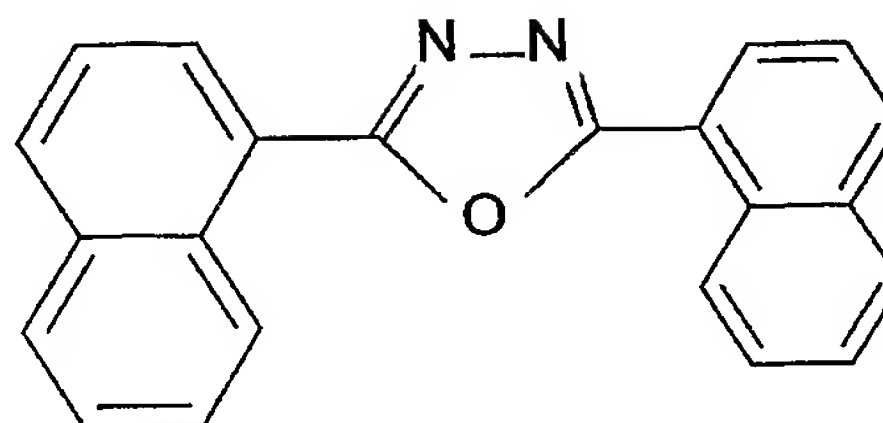
DTVb1

Fig. 2

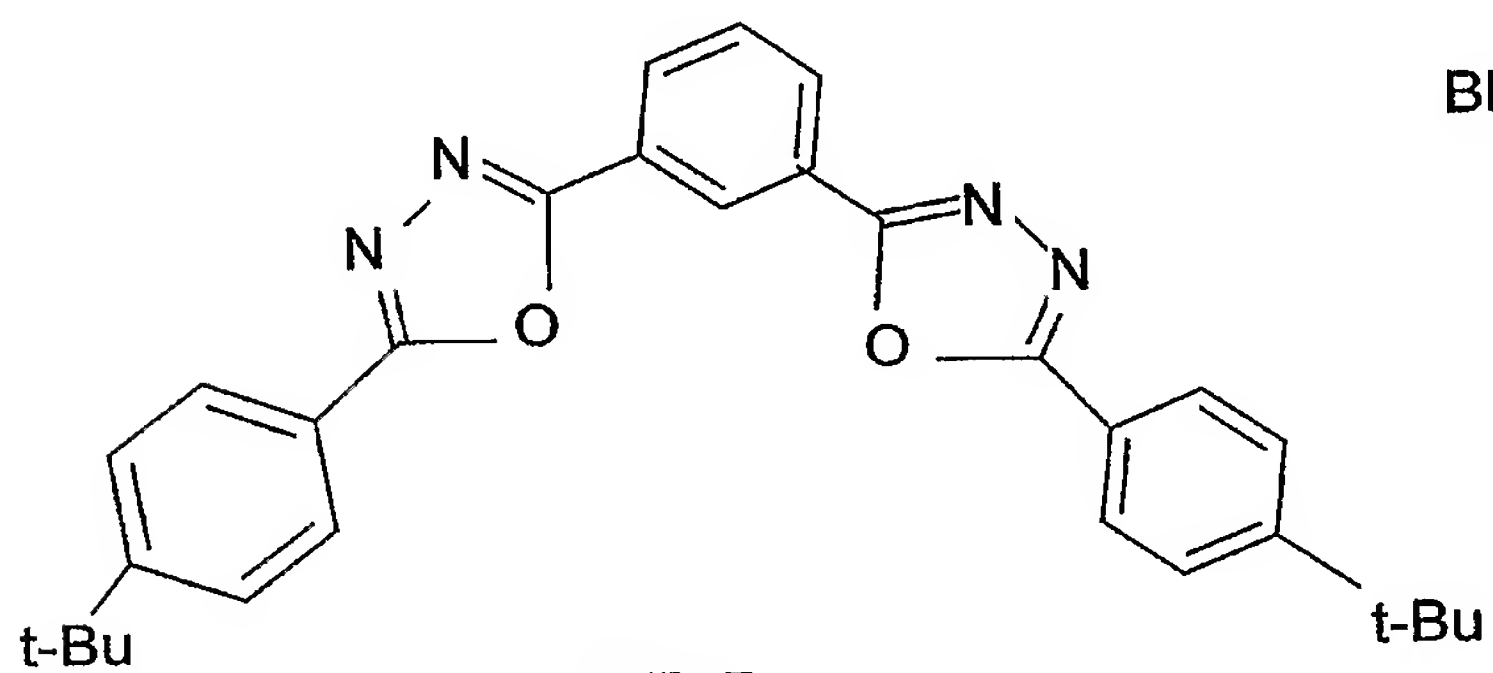
3/26



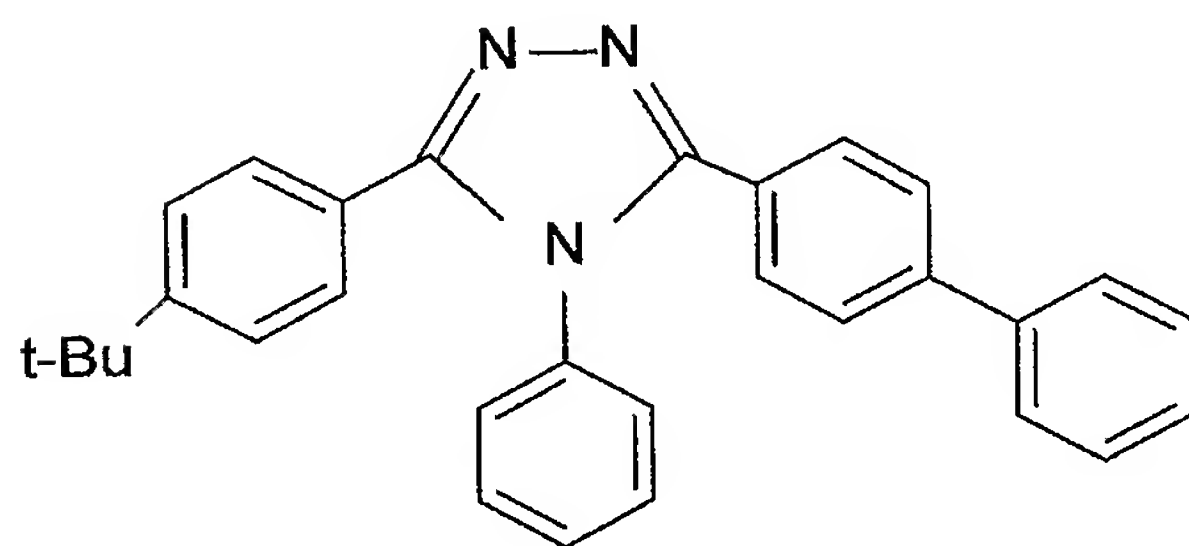
t-Bu-PBD



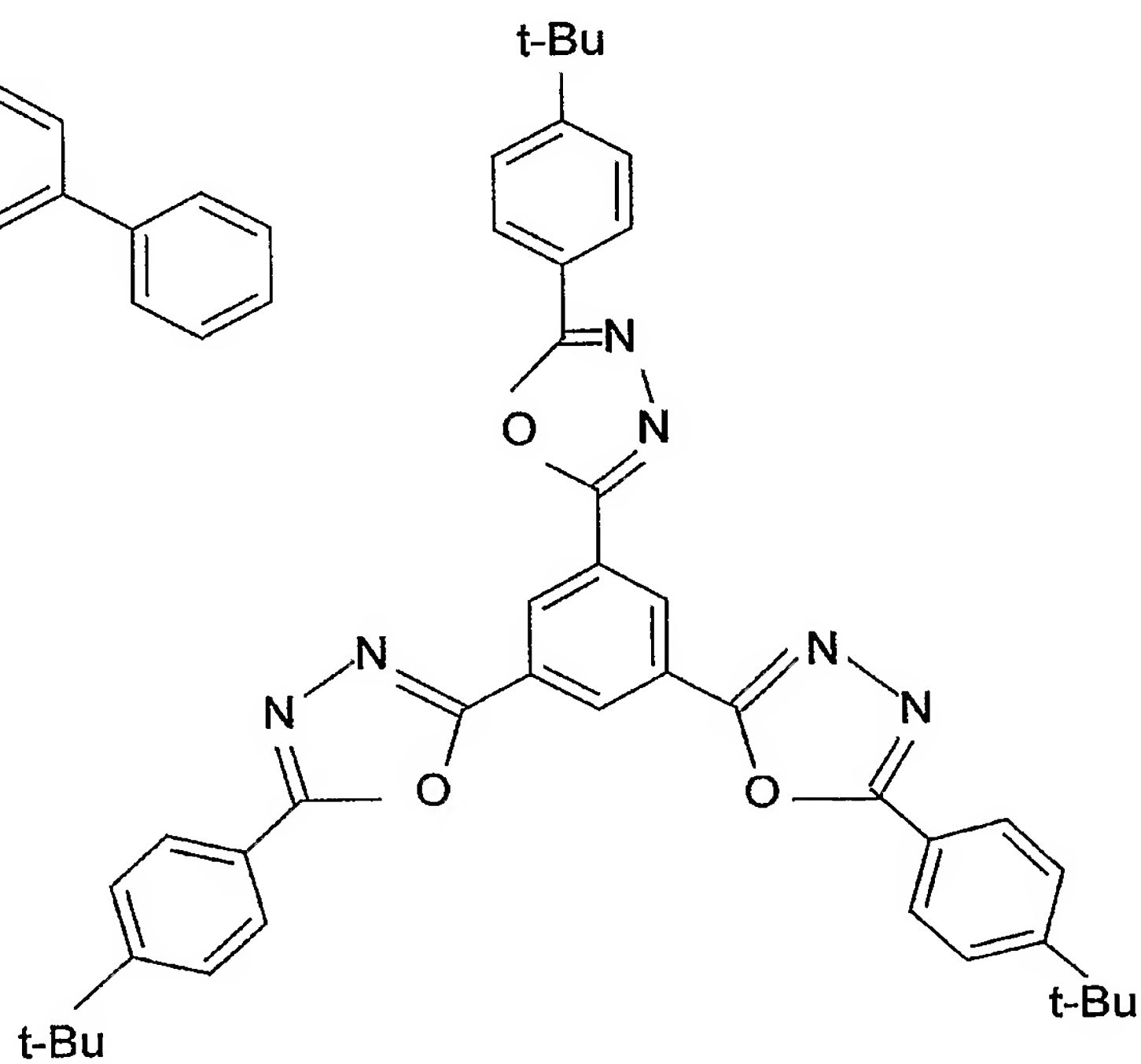
BND



OXD-7



TAZ



OXD-Star

Fig. 3

4/26

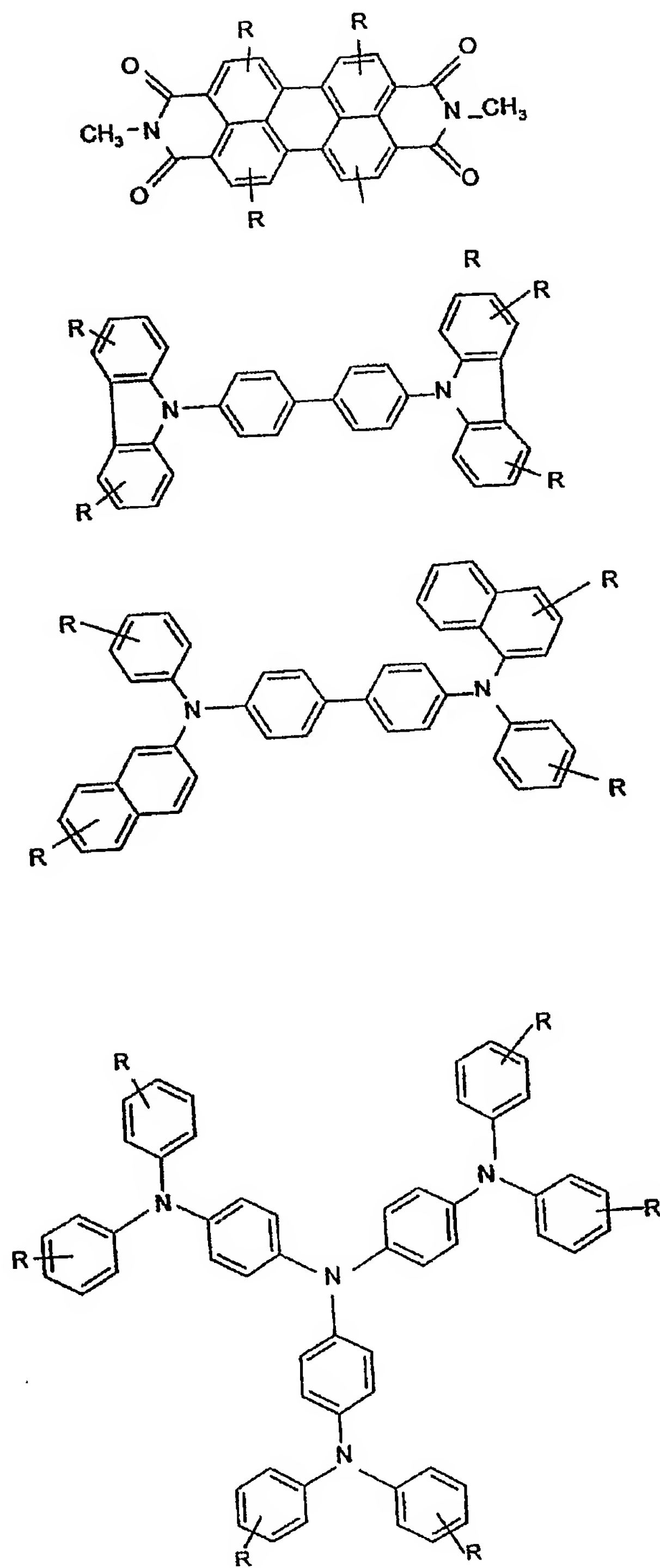


Fig. 4

5/26

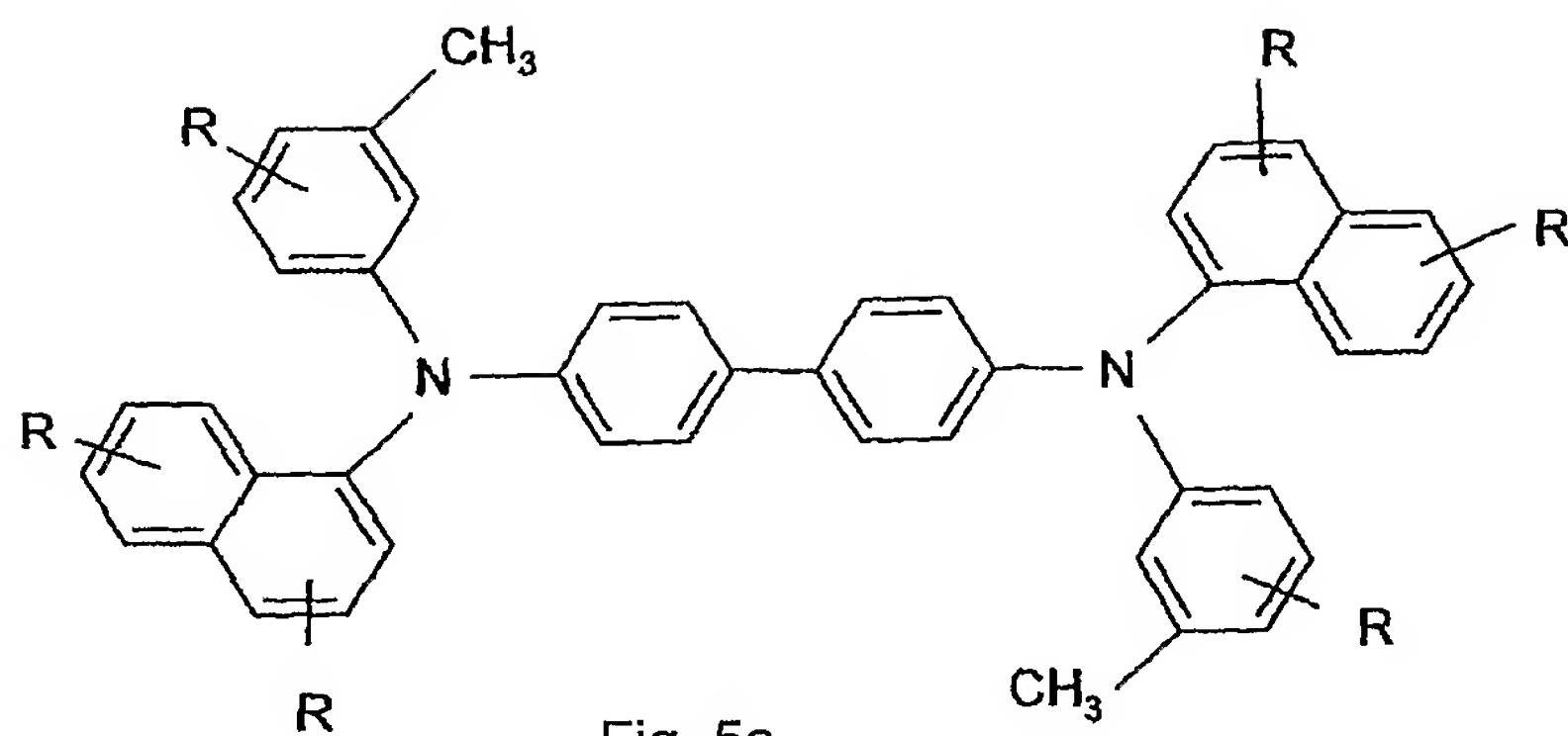


Fig. 5a

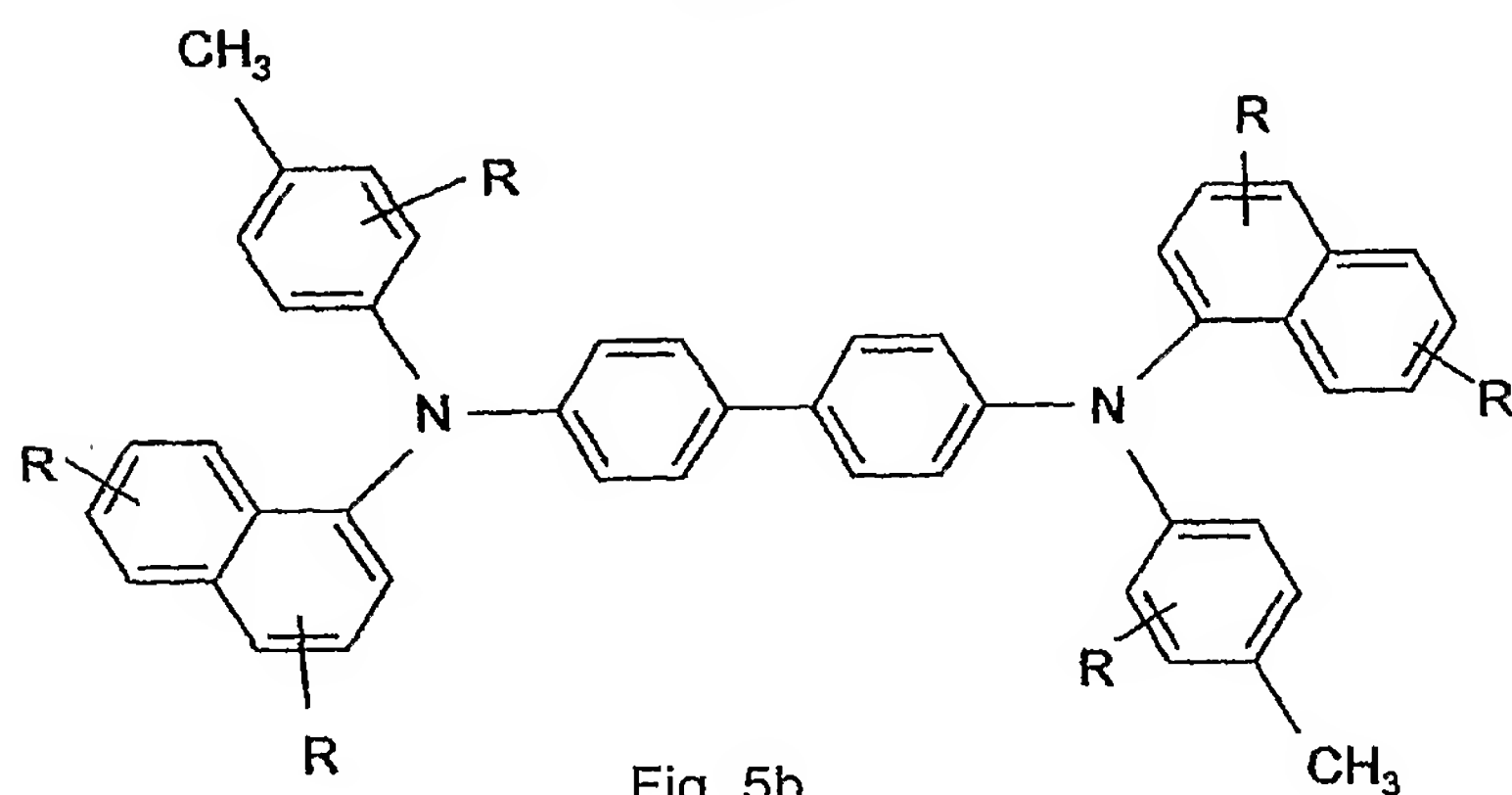


Fig. 5b

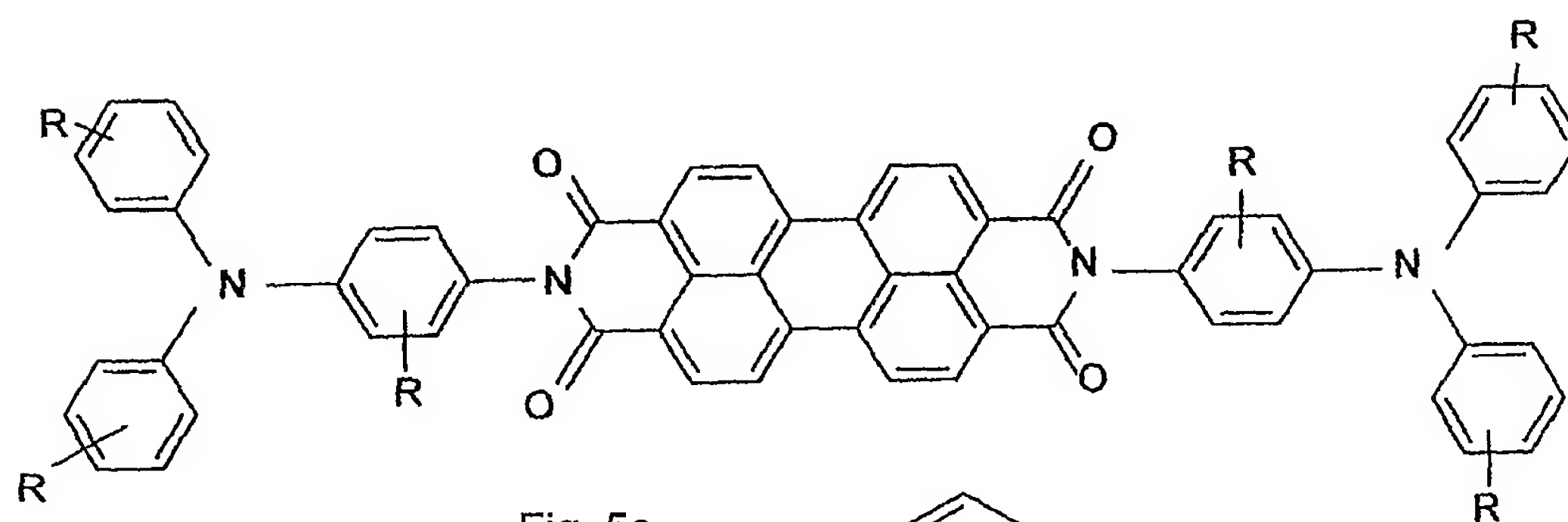


Fig. 5c

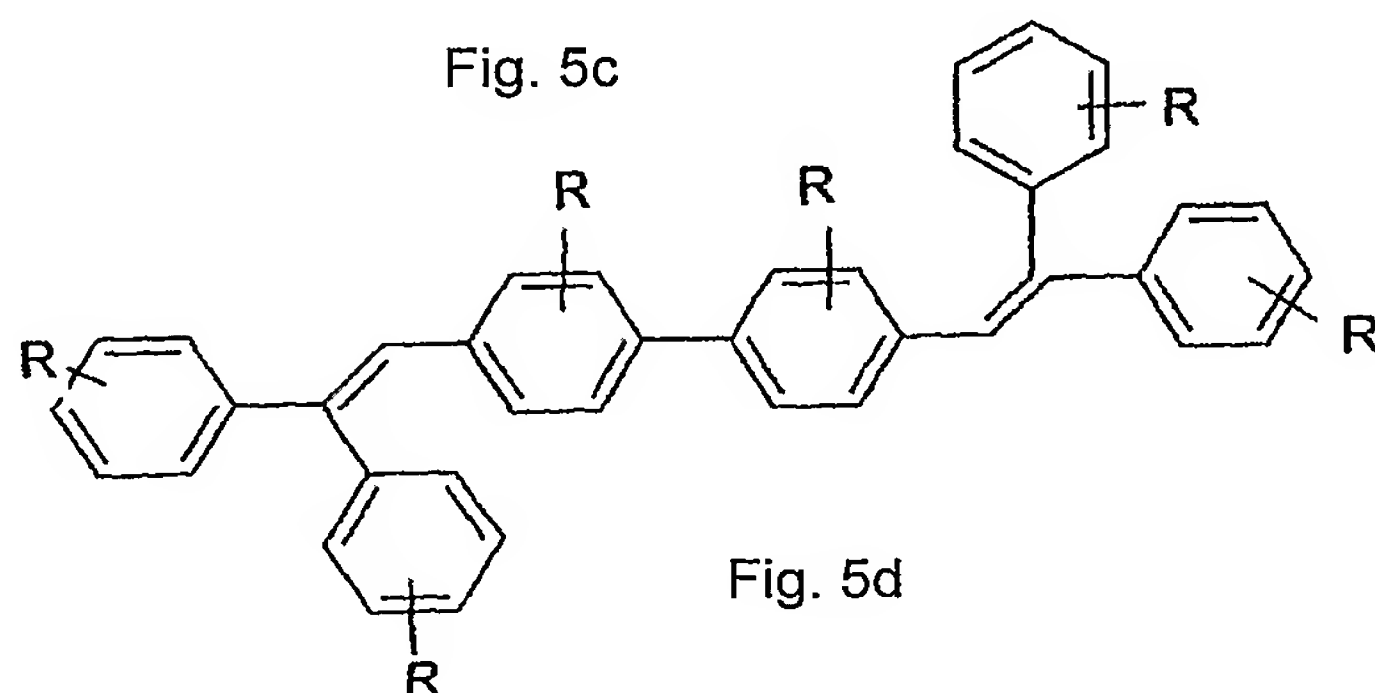
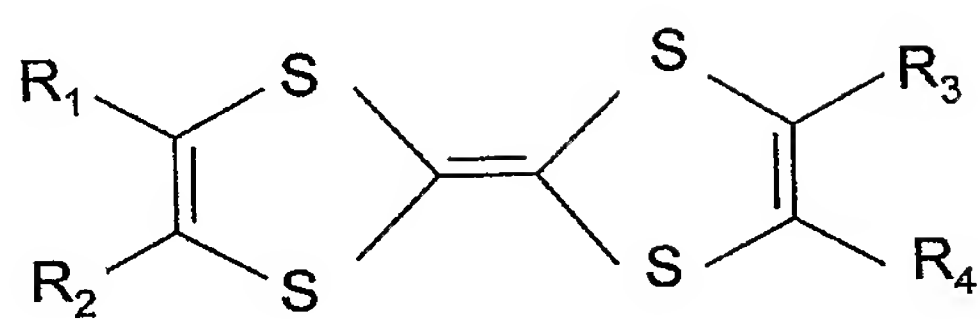
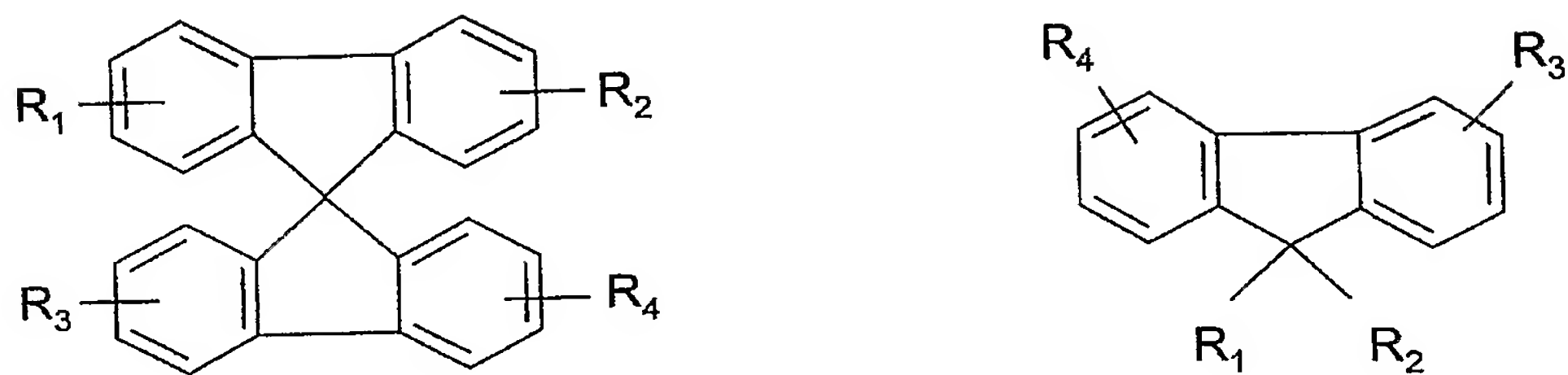


Fig. 5d

Fig. 5

6/26



or

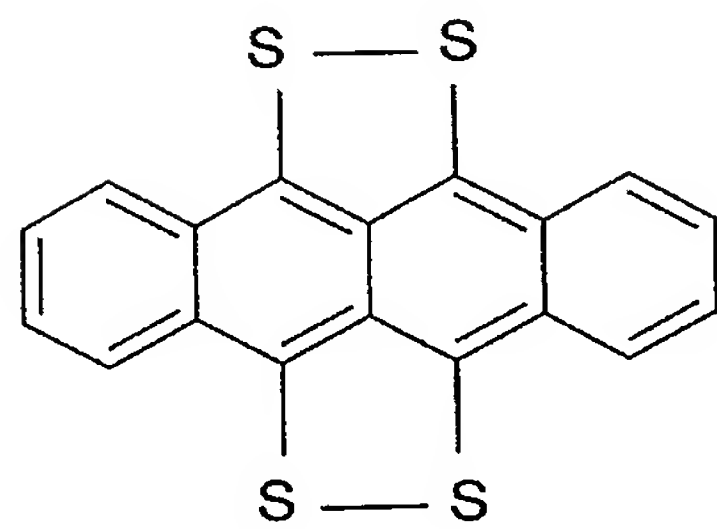
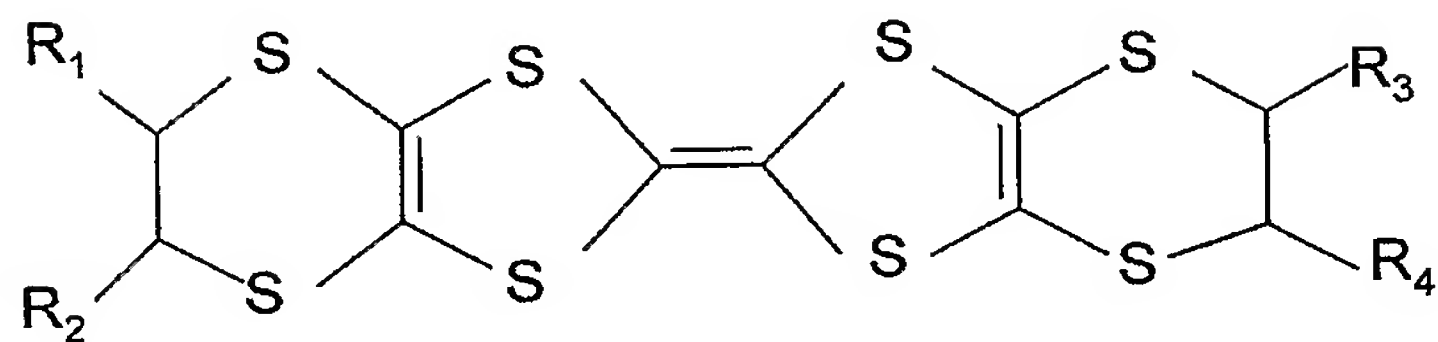


Fig. 6

7/26

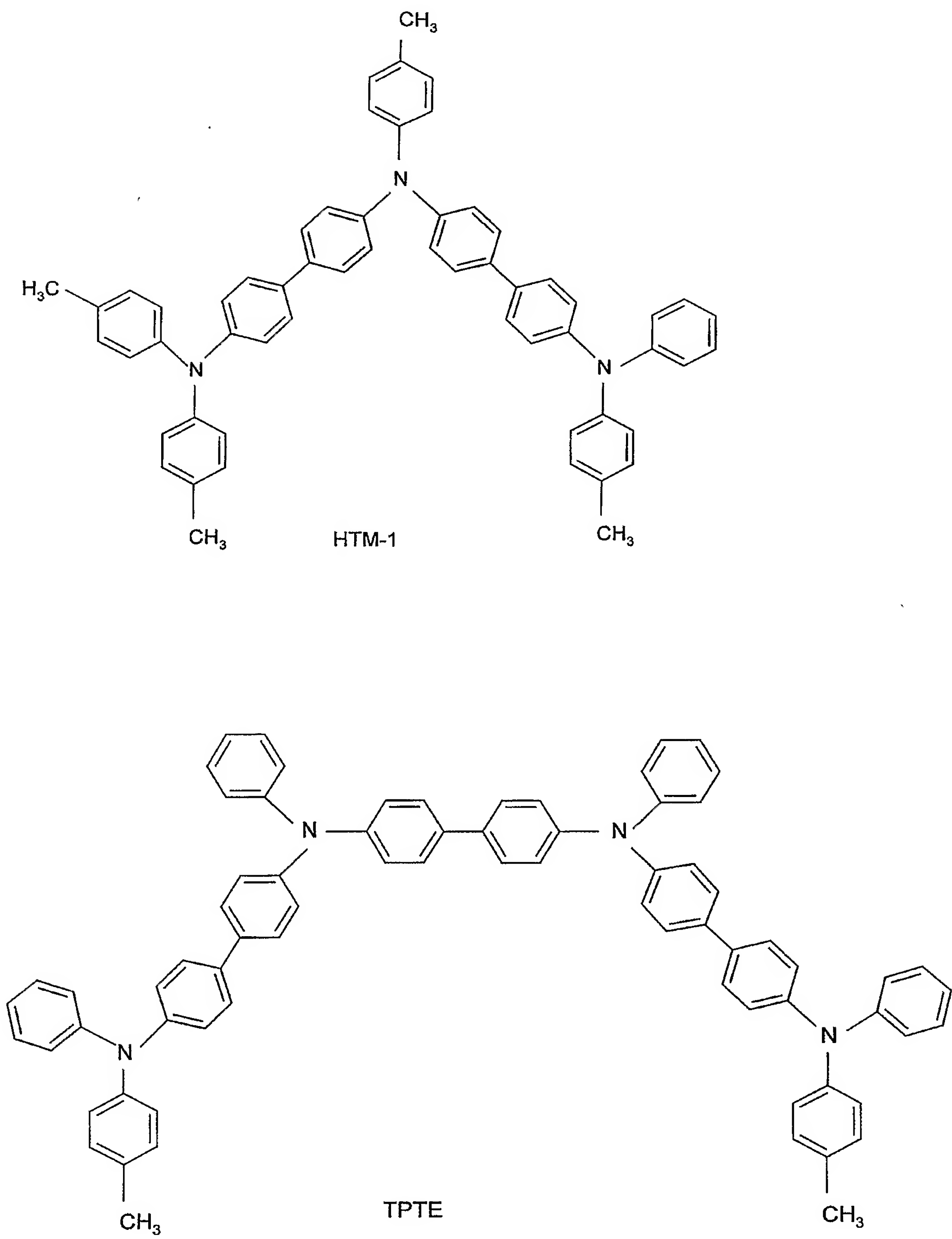
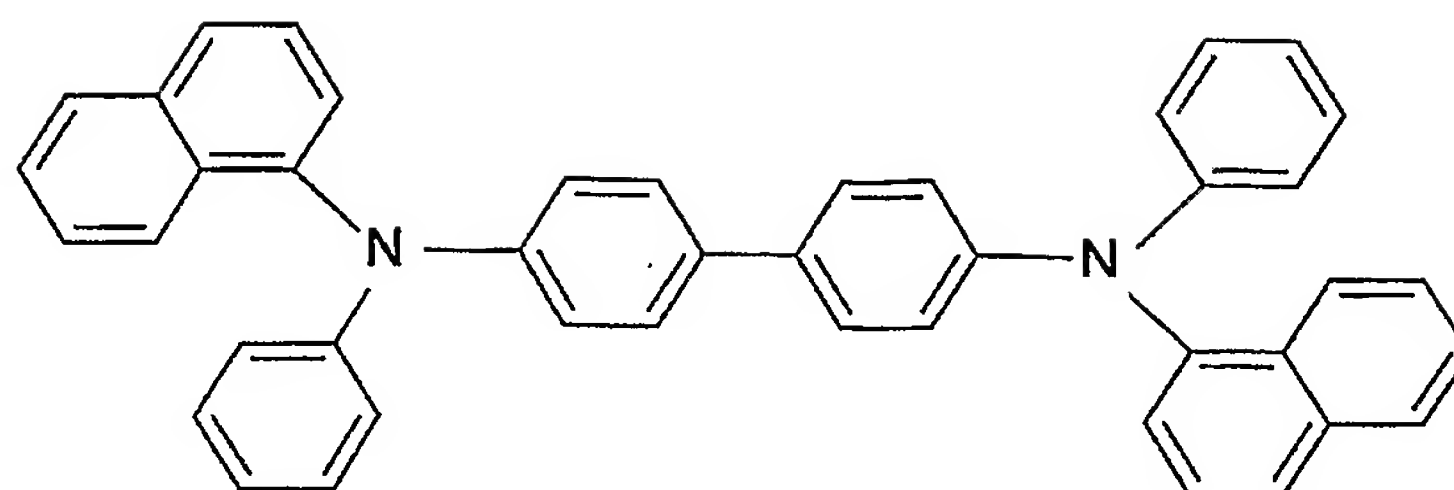
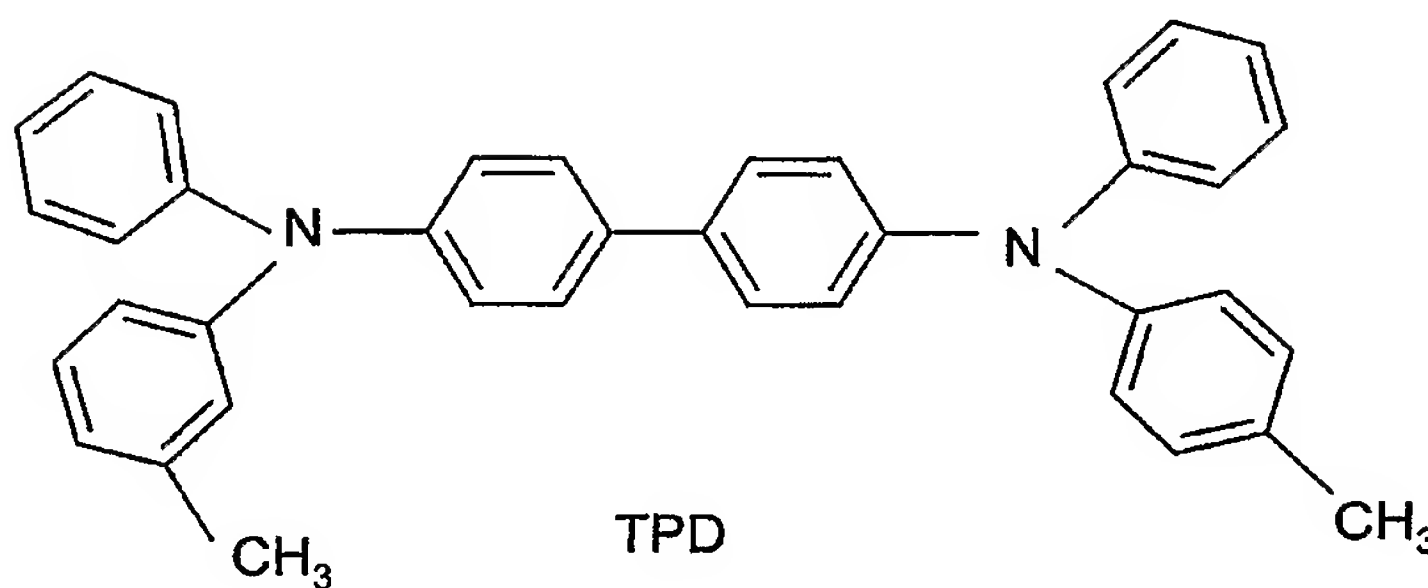
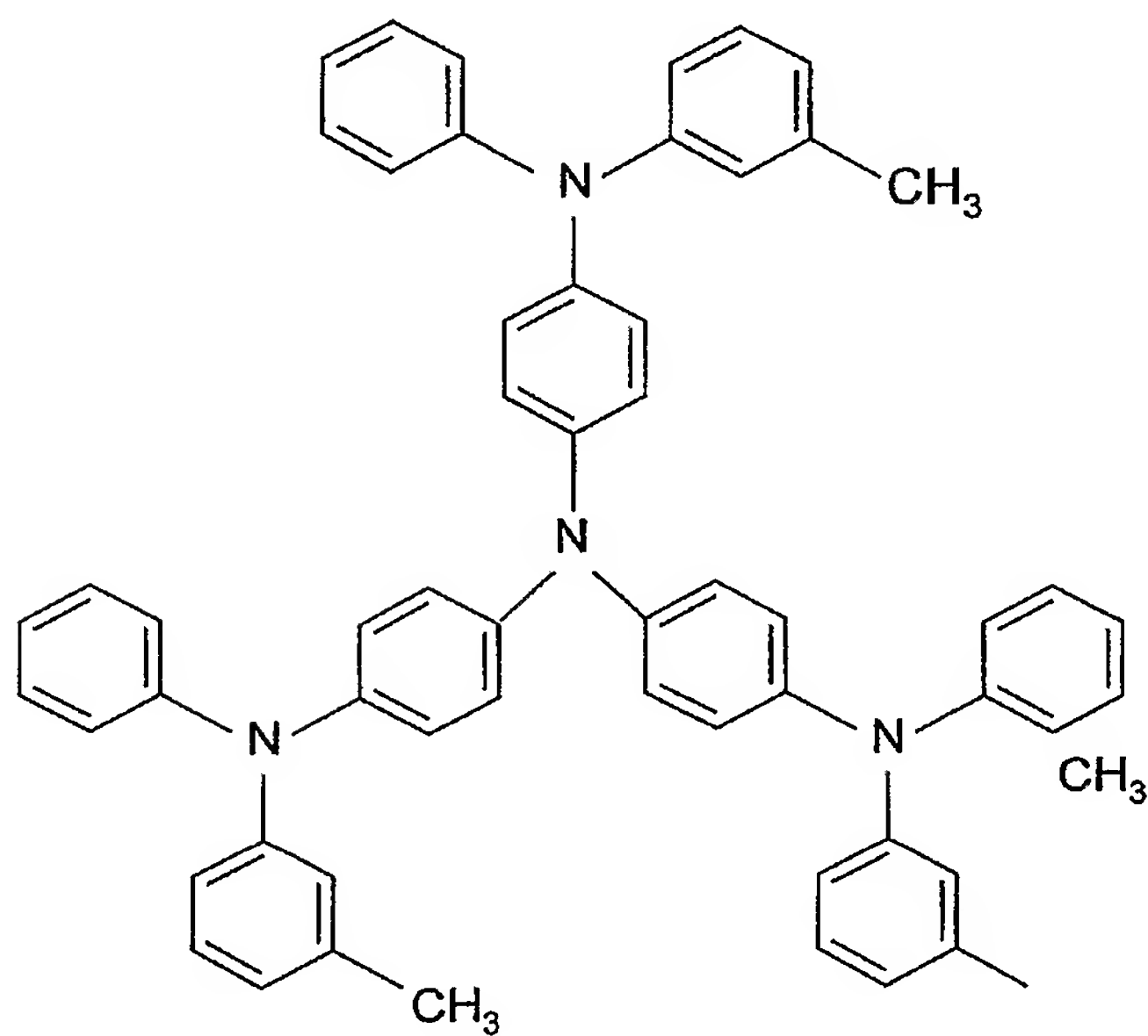


Fig. 7

8/26

 $\alpha$ -NPB

TPD



mTADATA

Fig. 8



9/26

ITO (165 nm)/CuPc (25 nm)/ $\alpha$ -NPB (40 nm)/TCTA : Compound A (38 : 2.1 nm)/Liq (30 nm)/LiF (0.5 nm)/Al

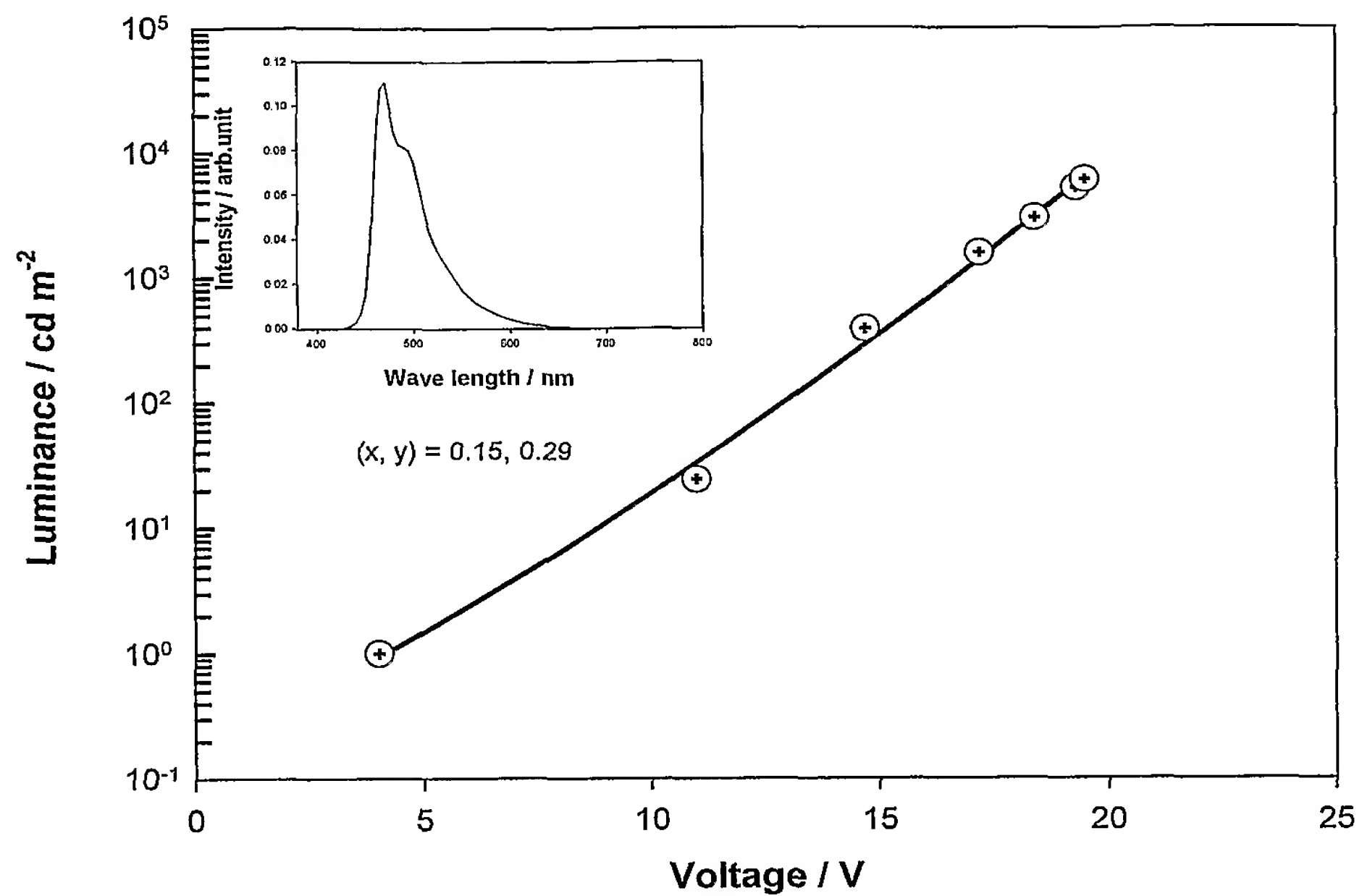


Fig. 9a

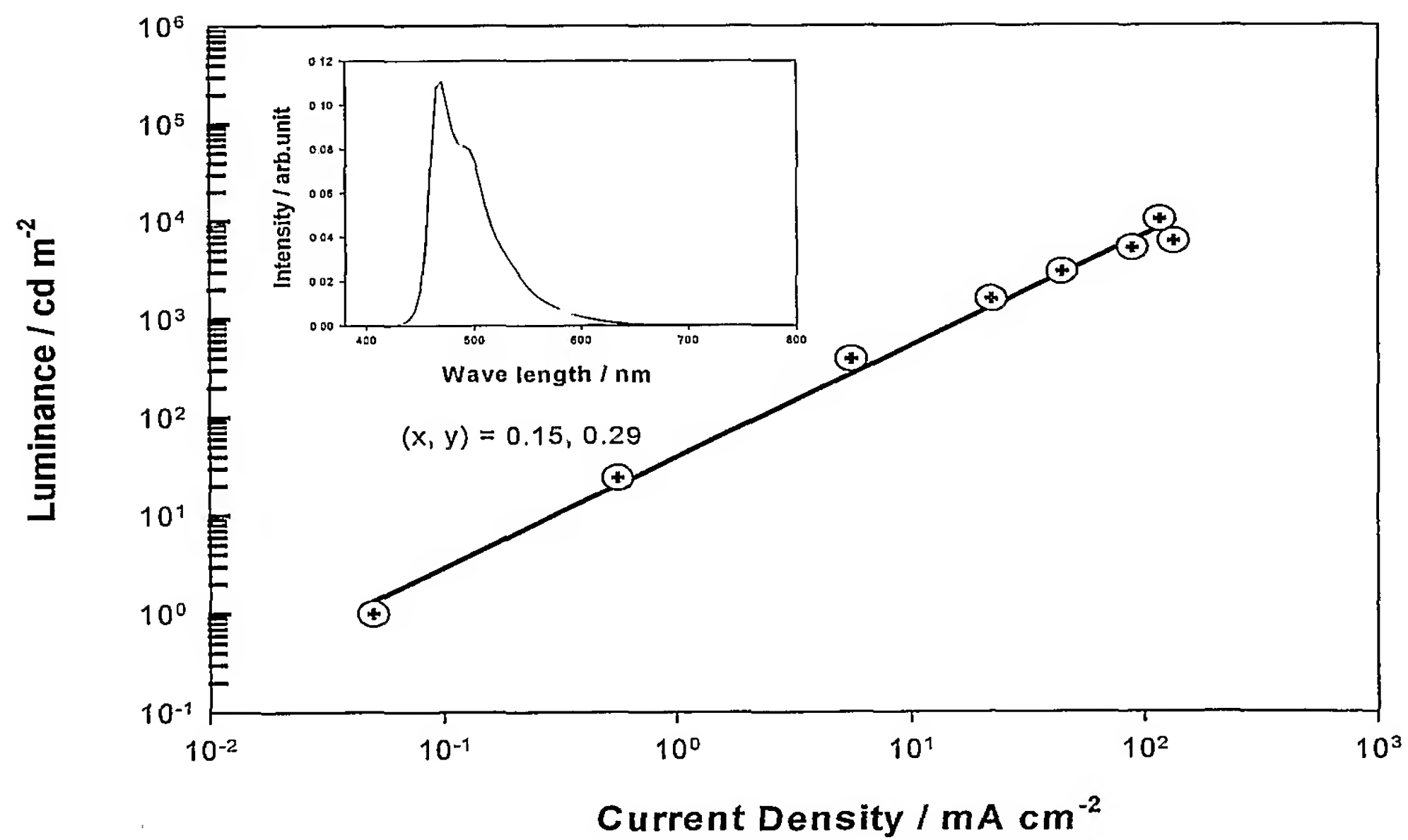


Fig. 9b

10/26

ITO (165 nm)/CuPc (25 nm)/ $\alpha$ -NPB (40 nm)/TCTA : Compound A (38 : 2.1 nm)/Liq (30 nm)/LiF (0.5 nm)/Al

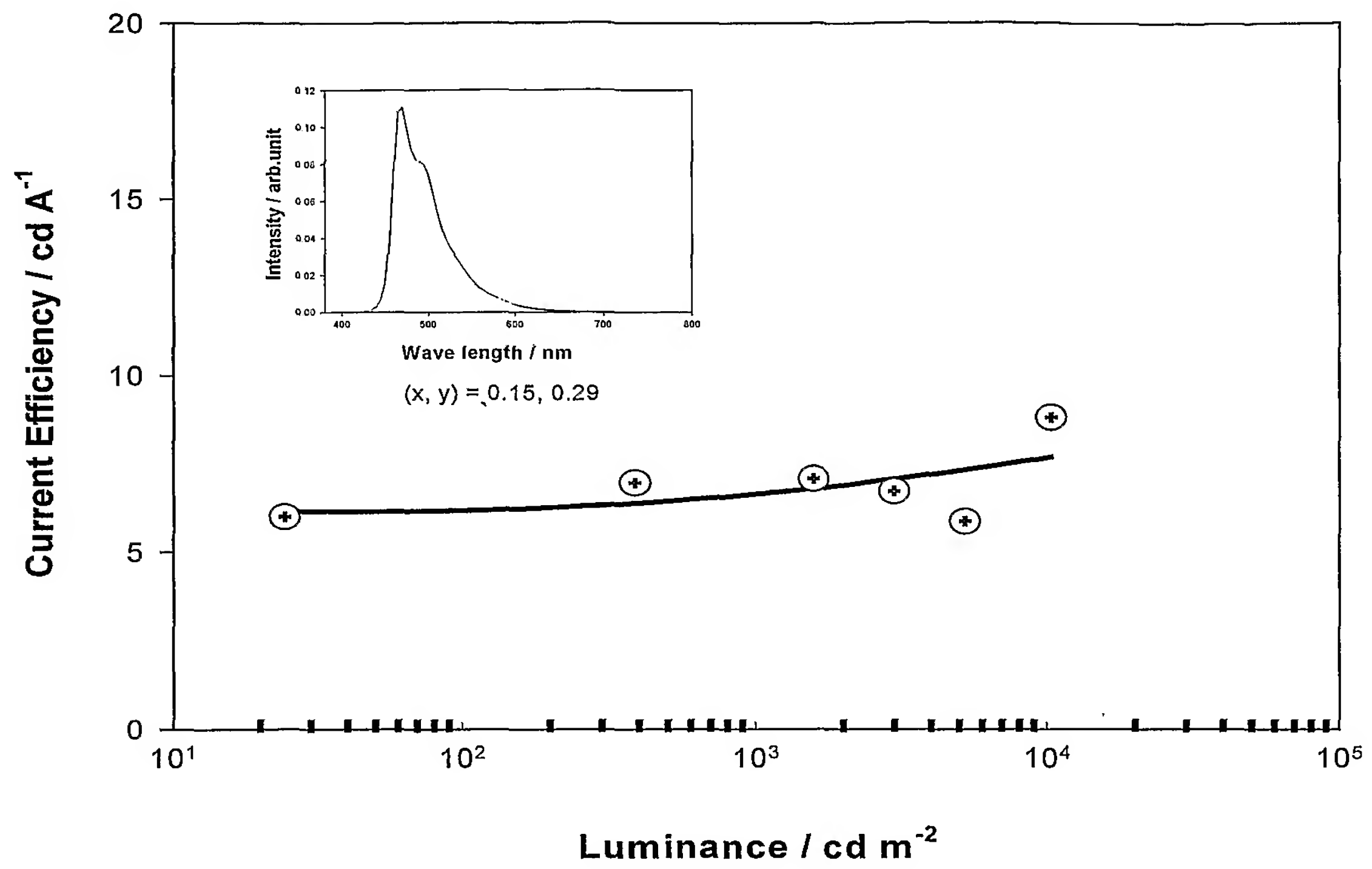


Fig. 9c

11/26

ITO (165 nm)/CuPc (25 nm)/ $\alpha$ -NPB (40 nm)/TCTA : Compound F (37 : 3 nm)/Compound B (3 nm)/Zr<sub>q</sub>4 (30 nm)/LiF (0.5 nm)/Al

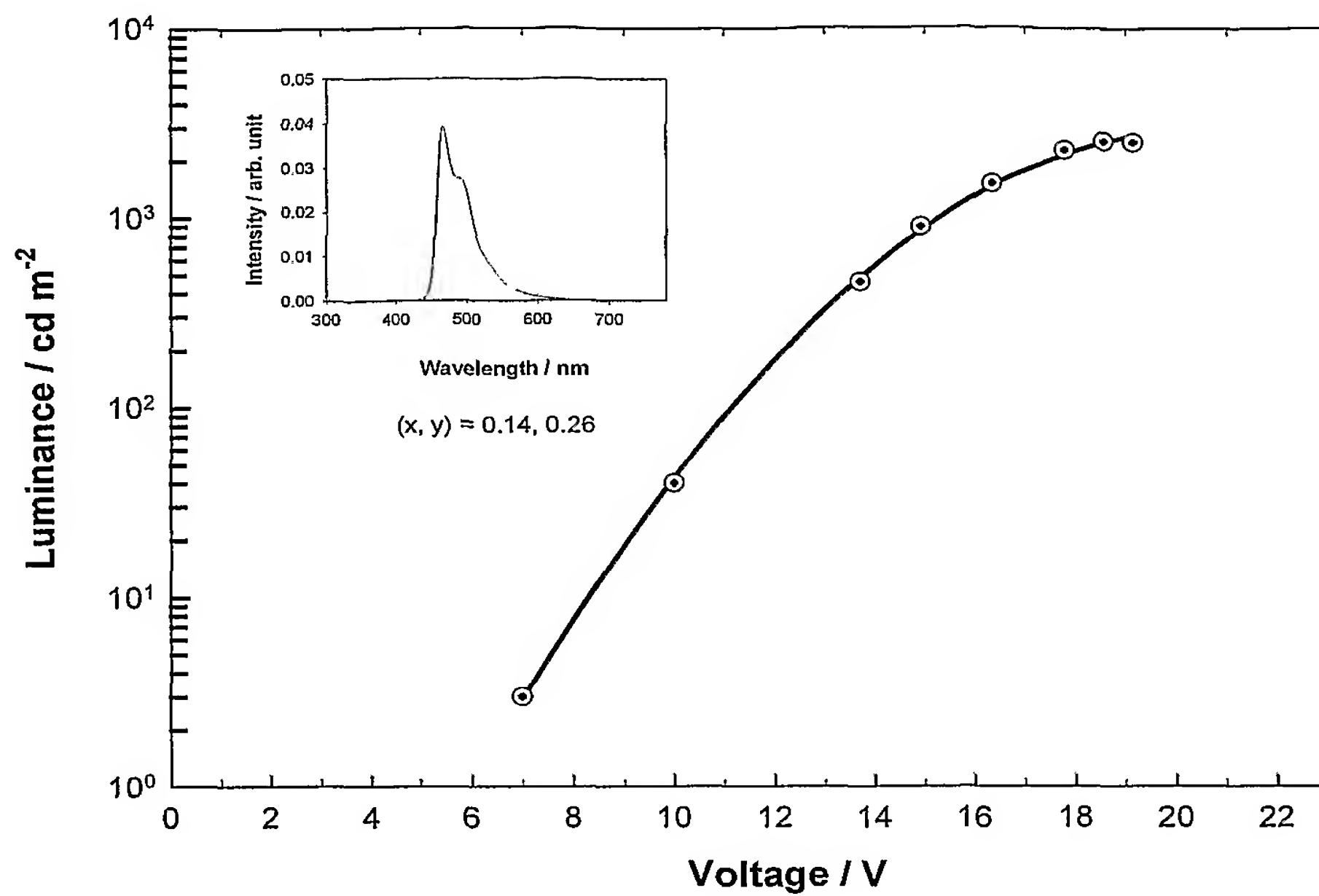


Fig. 10a

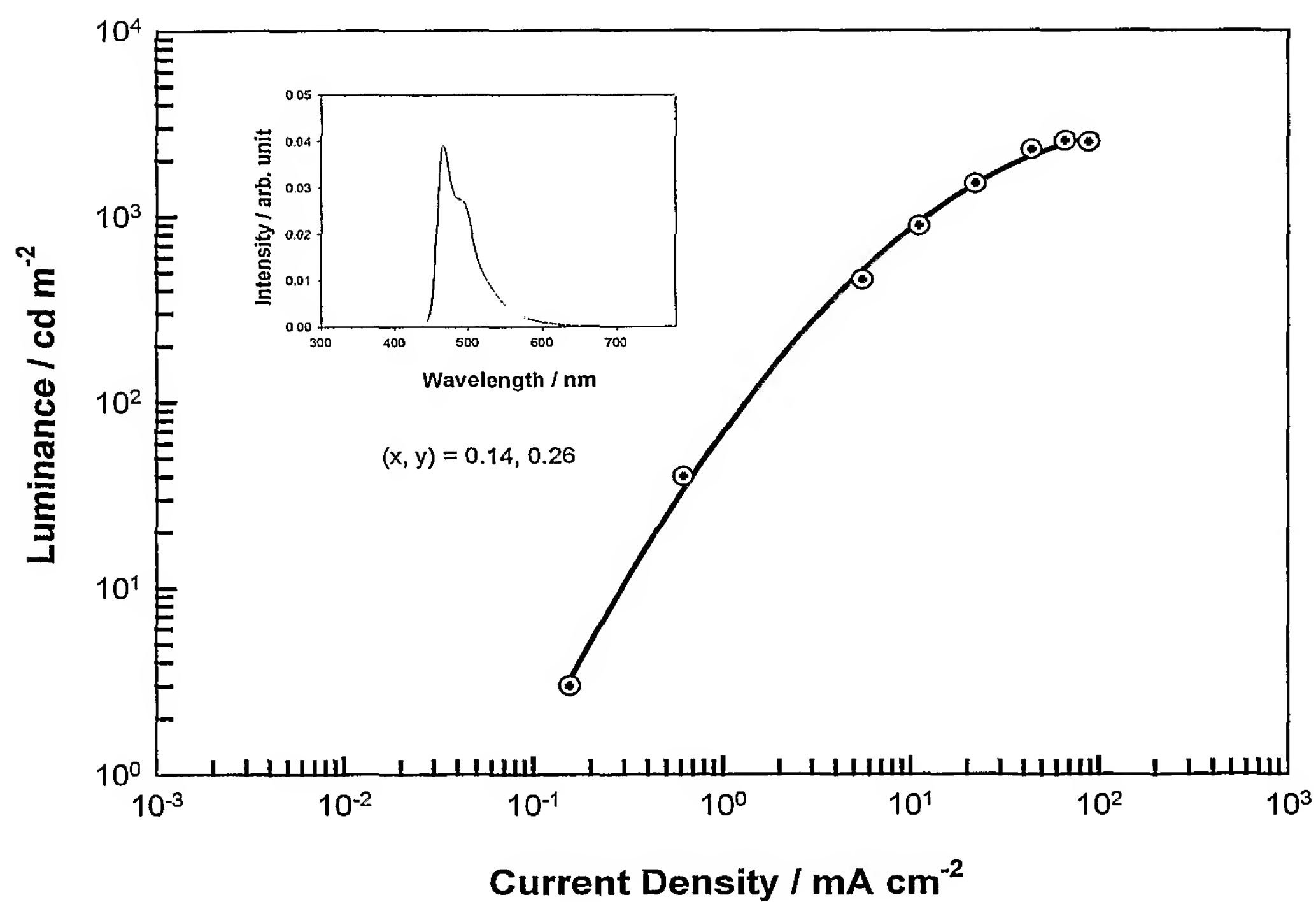


Fig. 10b

12/26

ITO (165 nm)/CuPc (25 nm)/□-NPB (40 nm)/TCTA : Compound F (37 : 3 nm)/Compound B (3 nm)/Zr<sub>q</sub>4 (30 nm)/LiF (0.5 nm)/Al

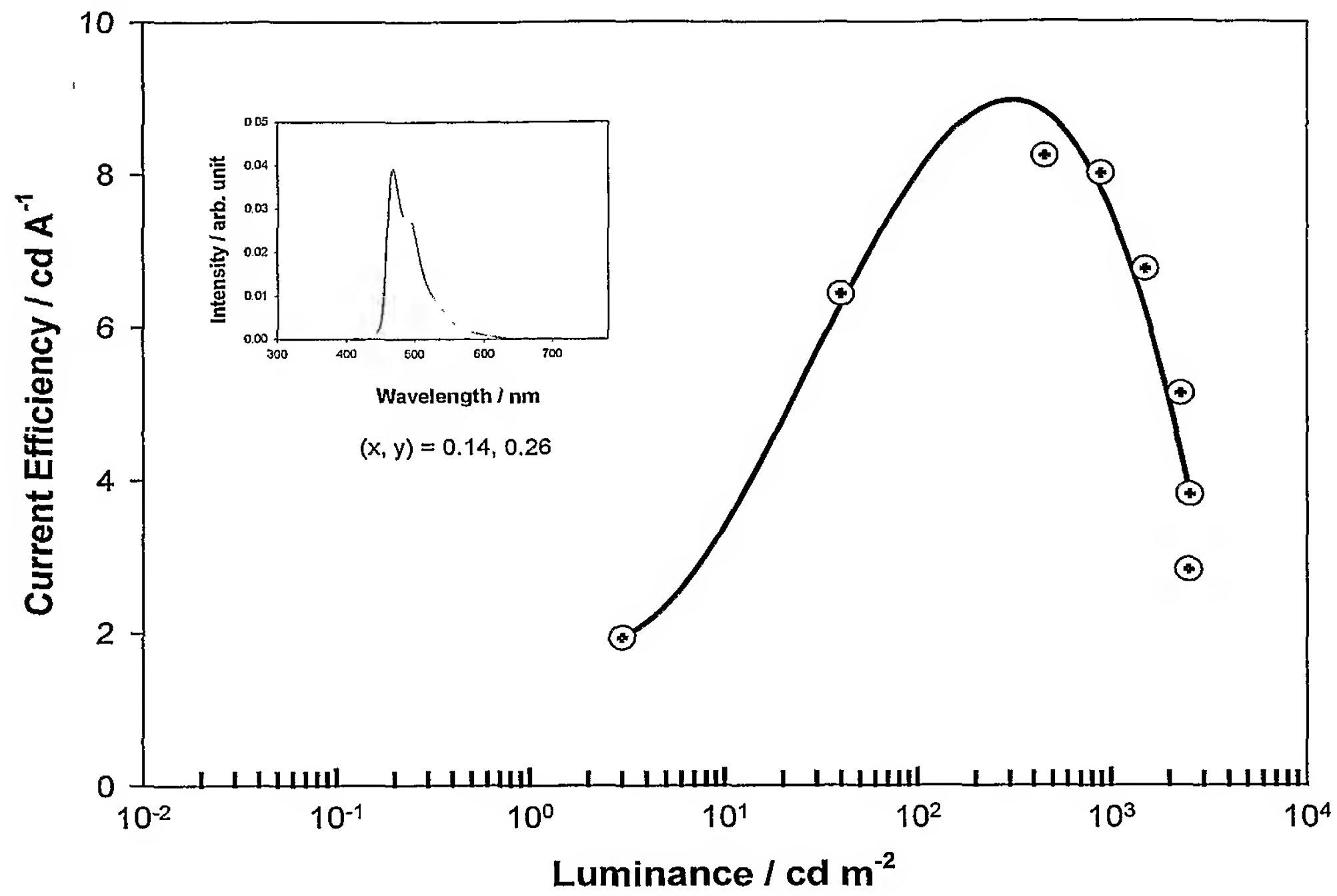


Fig. 10c

13/26

ITO (165 nm)/CuPc (25 nm)/ $\alpha$ -NPB (60 nm)/CBP : Compound D (20 : 1.3 nm)/BCP (6 nm)/Alq<sub>3</sub> (40 nm)/LiF (0.2

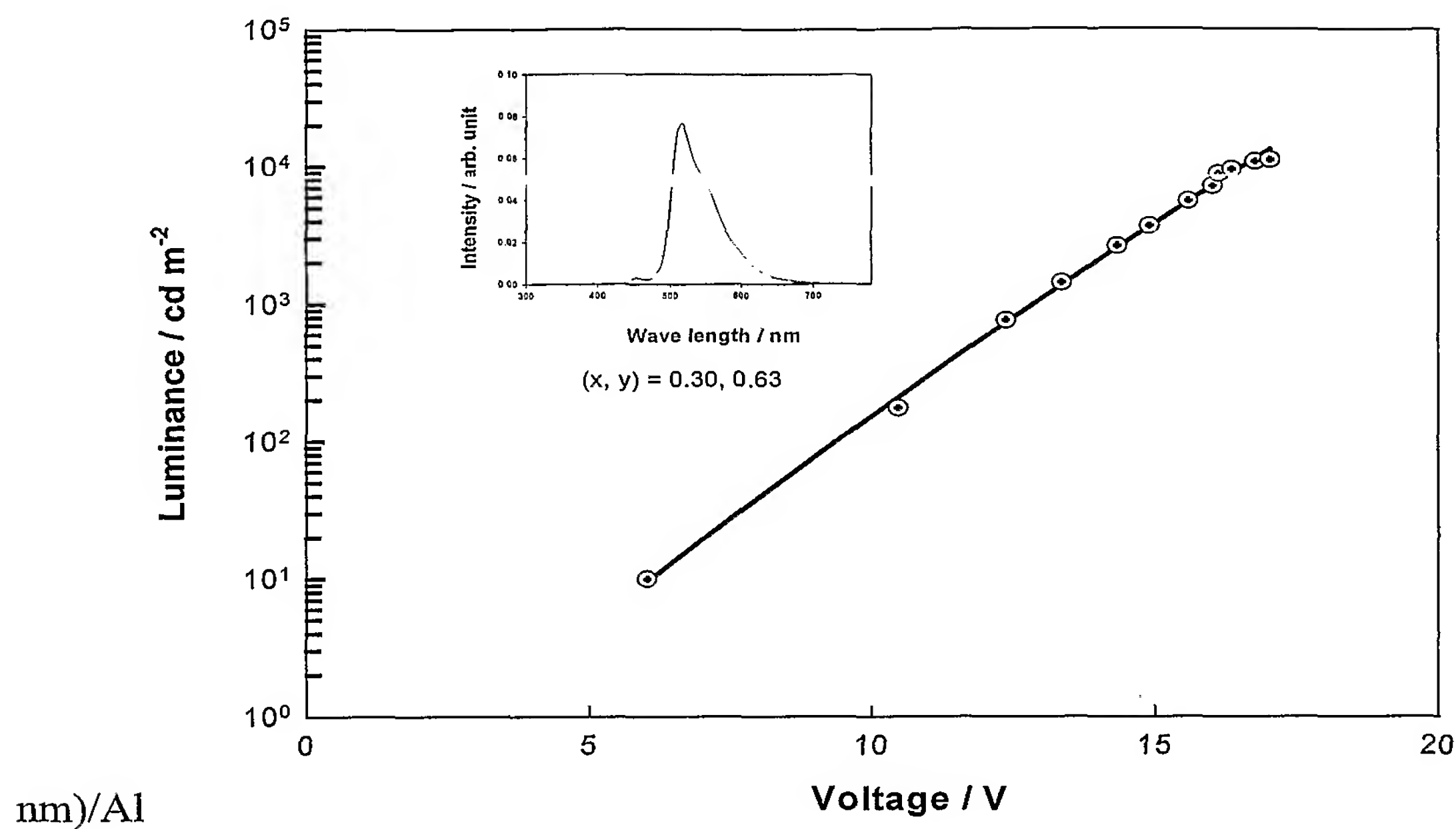


Fig. 11a

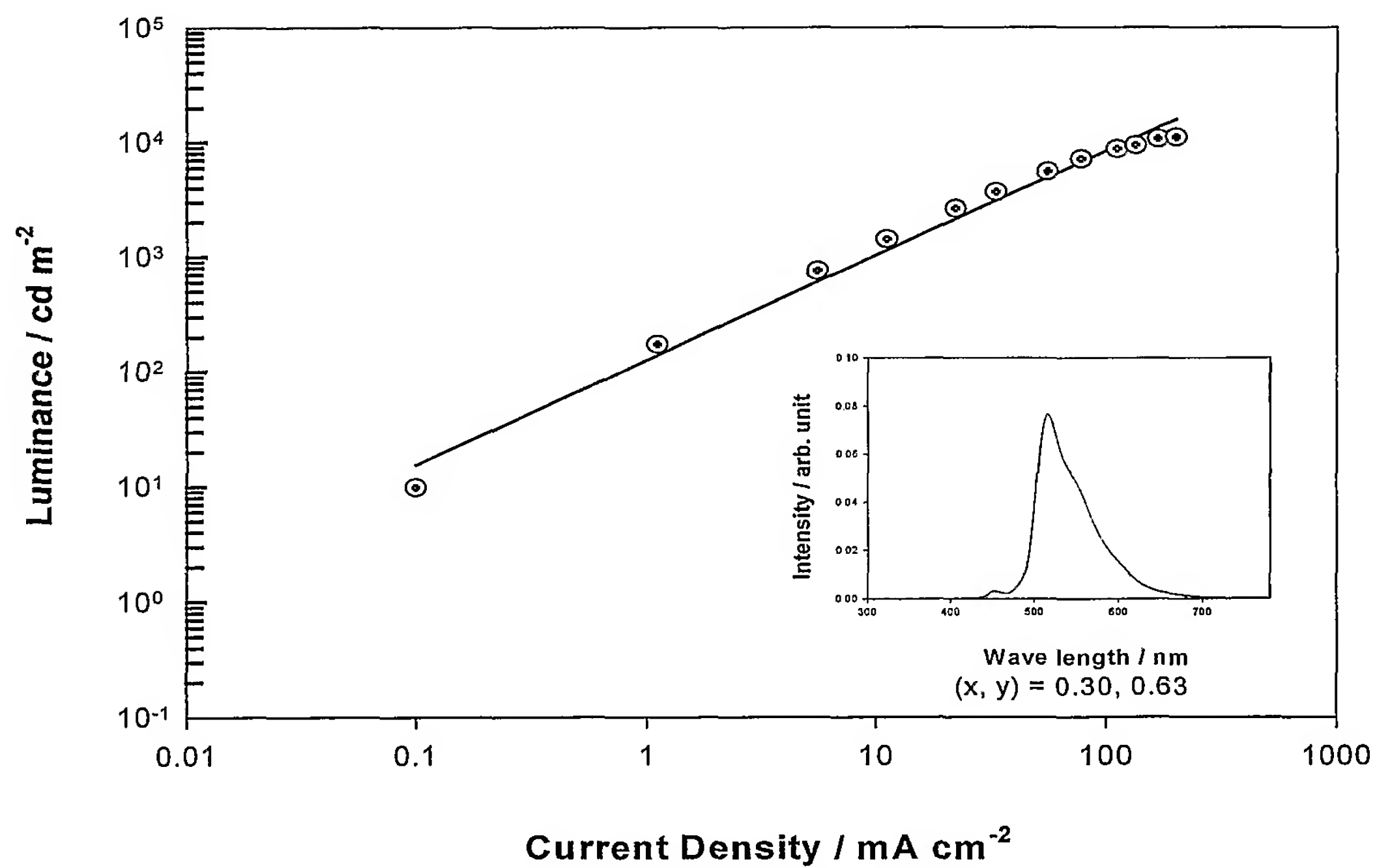


Fig. 11b

14/26

ITO (165 nm)/CuPc (25 nm)/ $\alpha$ -NPB (60 nm)/CBP : Compound J (20 : 1.3 nm)/BCP (6 nm)/Alq<sub>3</sub> (40 nm)/LiF (0.2 nm)/Al

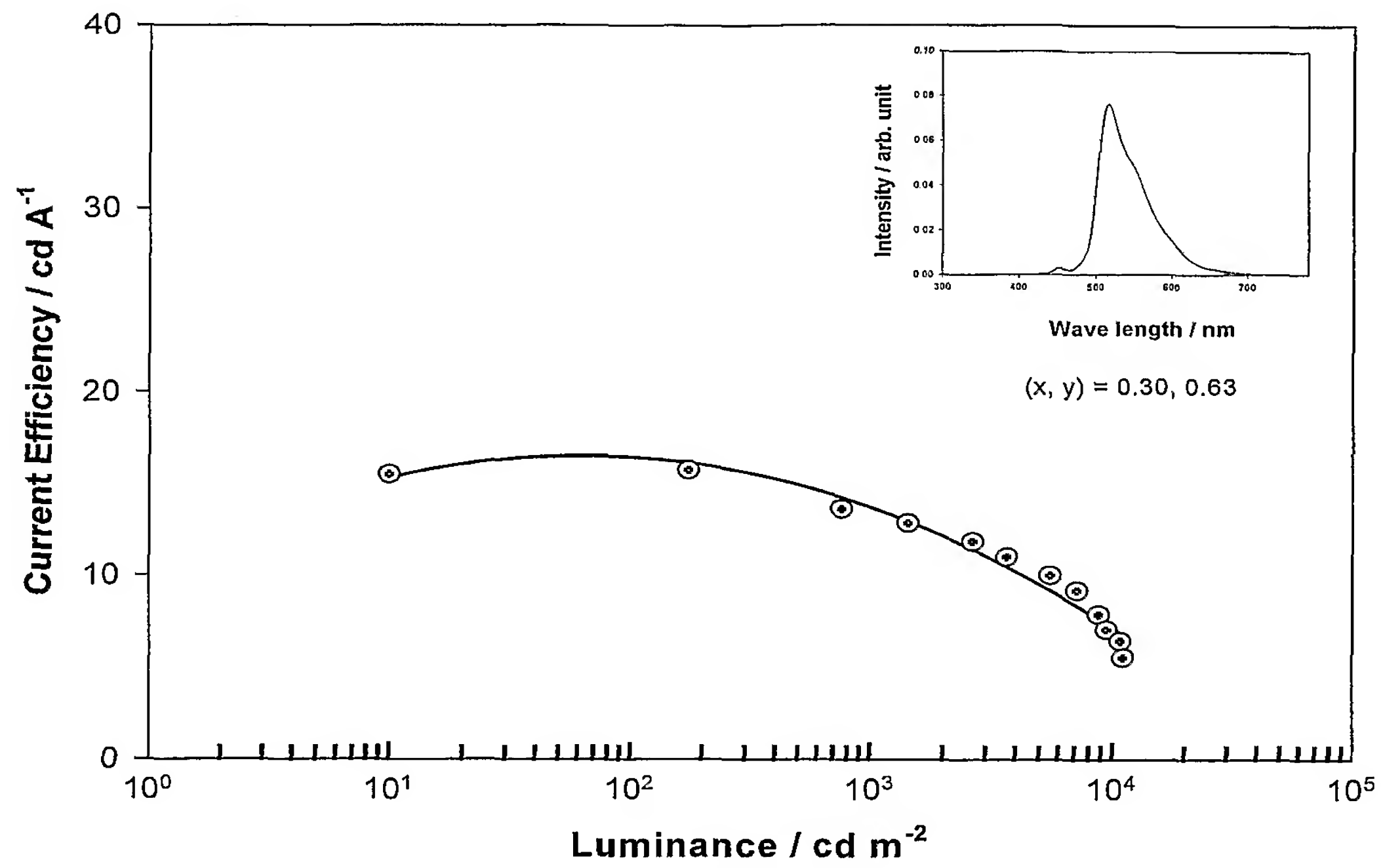


Fig. 11c

15/26

ITO (165 nm)/CuPc (25 nm)/ $\alpha$ -NPB (40 nm)/CBP : Compound D (20 : 0.6 nm)/BCP (6 nm)/Liq (40 nm)/LiF (0.5 nm)/Al

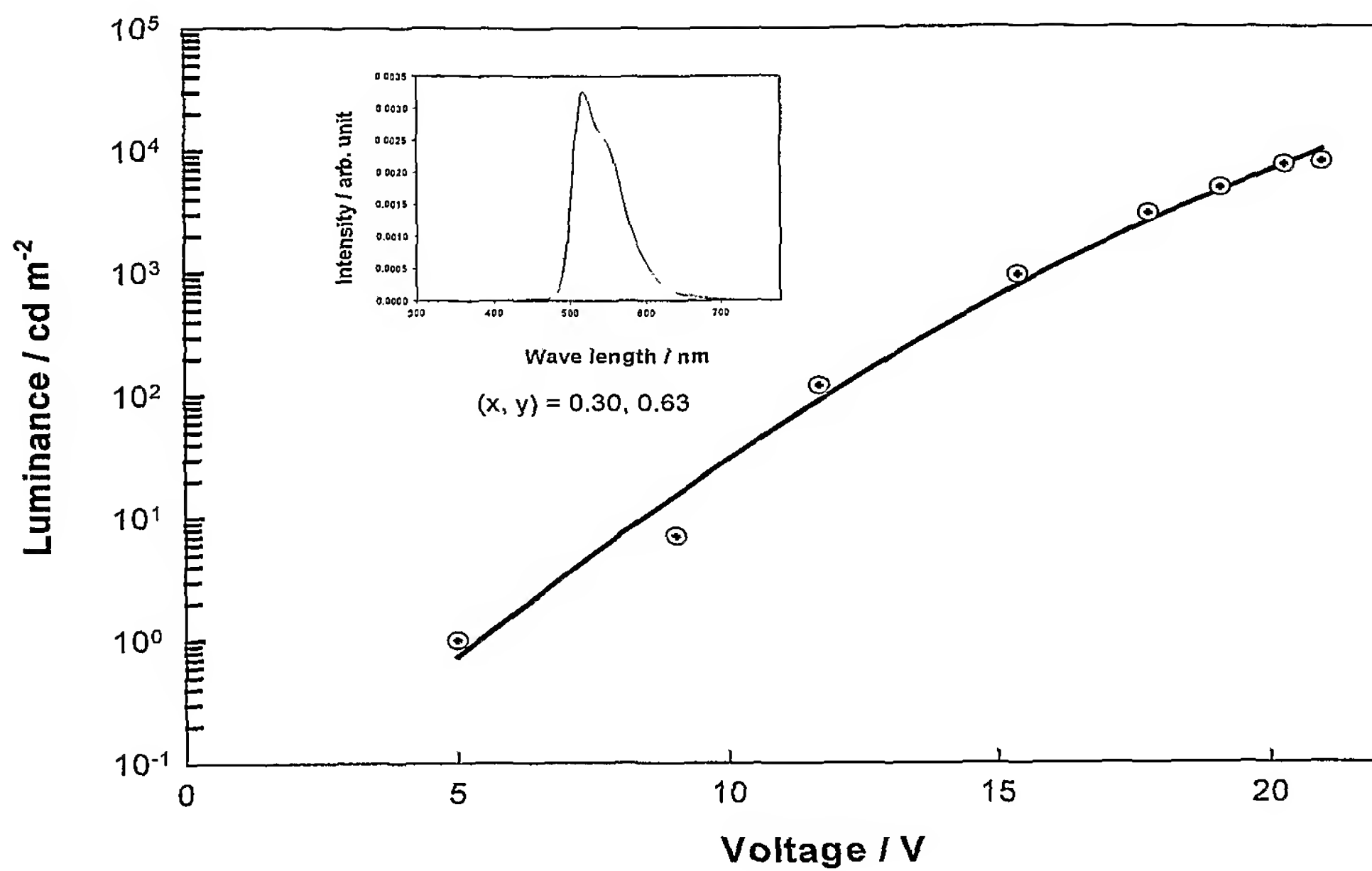


Fig. 12a

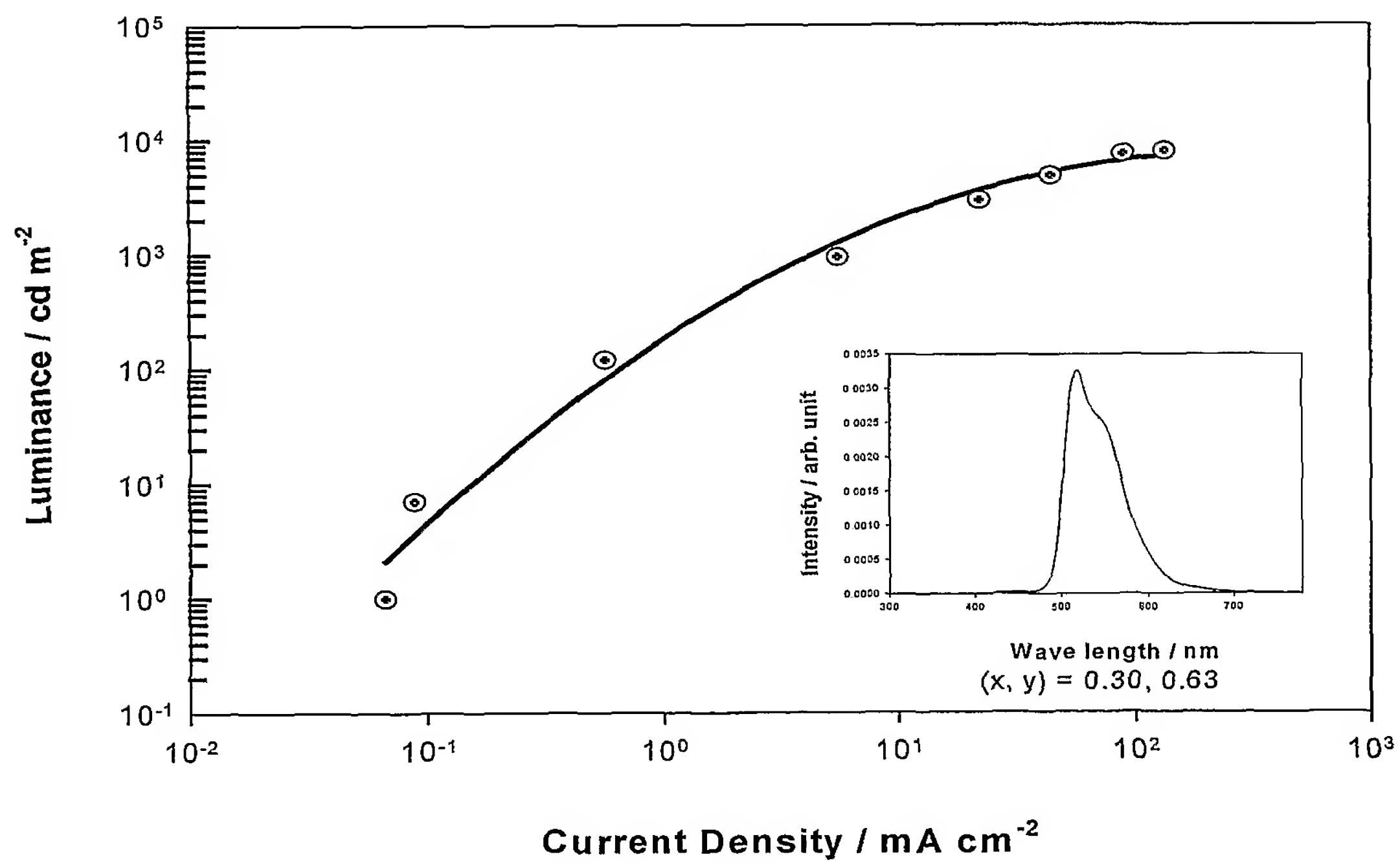


Fig. 12b

16/26

ITO (165 nm)/CuPc (25 nm)/ $\alpha$ -NPB (40 nm)/CBP : Compound D (20 : 0.6 nm)/BCP (6 nm)/LiQ (40 nm)/LiF (0.5 nm)/Al

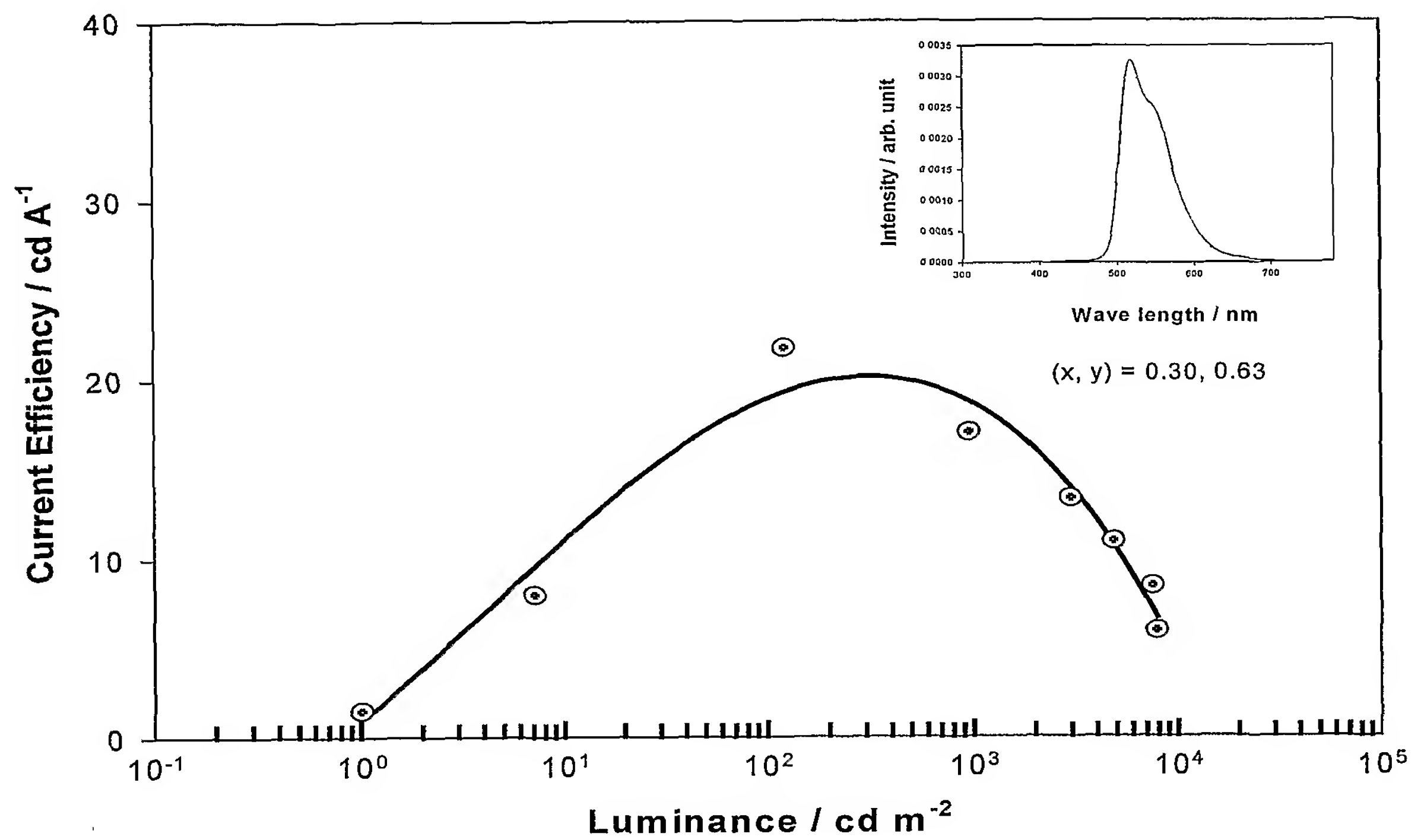


Fig. 12c



17/26

ITO (165 nm)/ $\alpha$ -NPB (40 nm)/CBP : Compound D (20 : 7 nm)/BCP (10 nm)/Zr<sub>q</sub>4 (50 nm)/LiF (0.5 nm)/Al

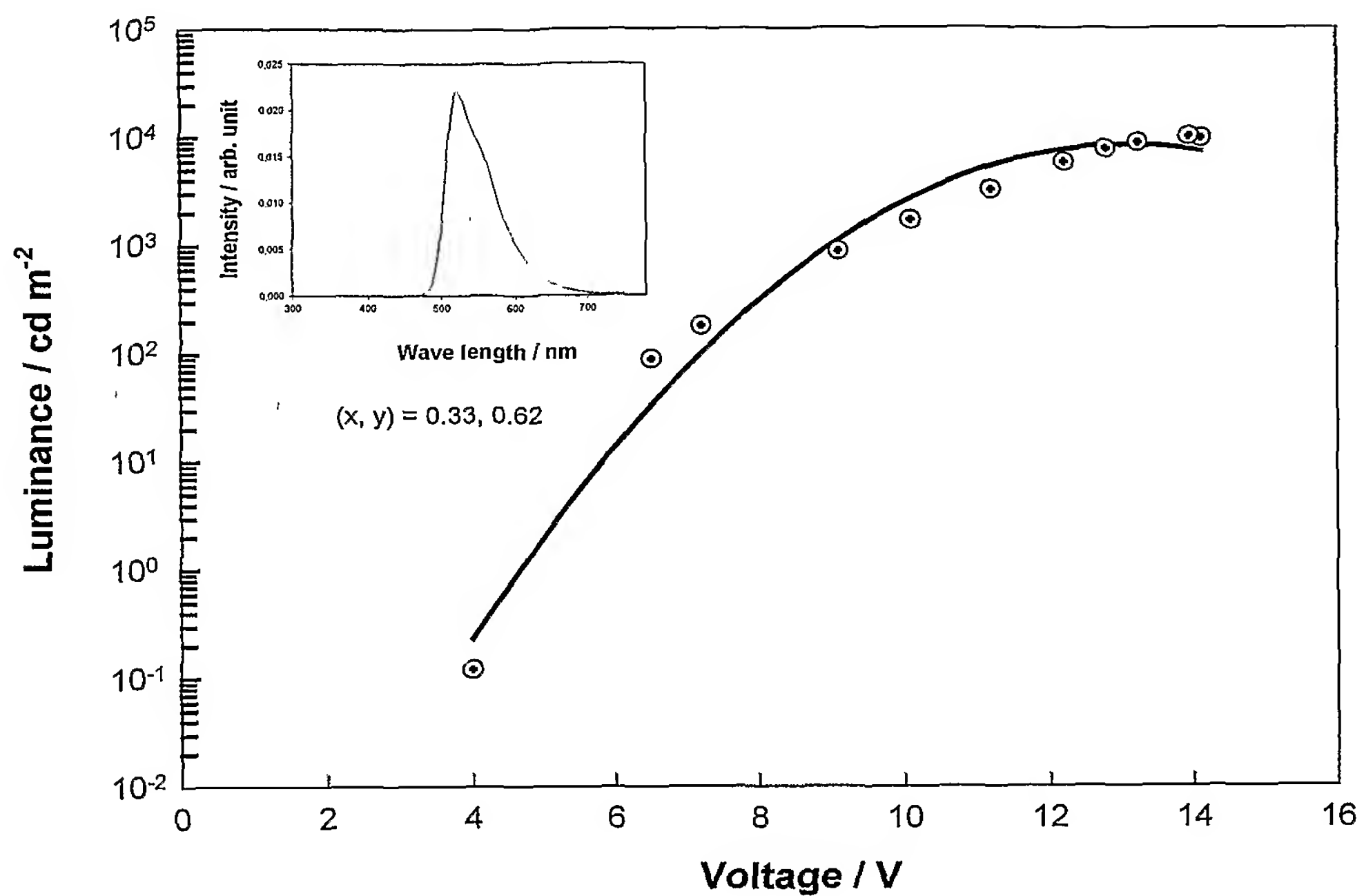


Fig. 13a

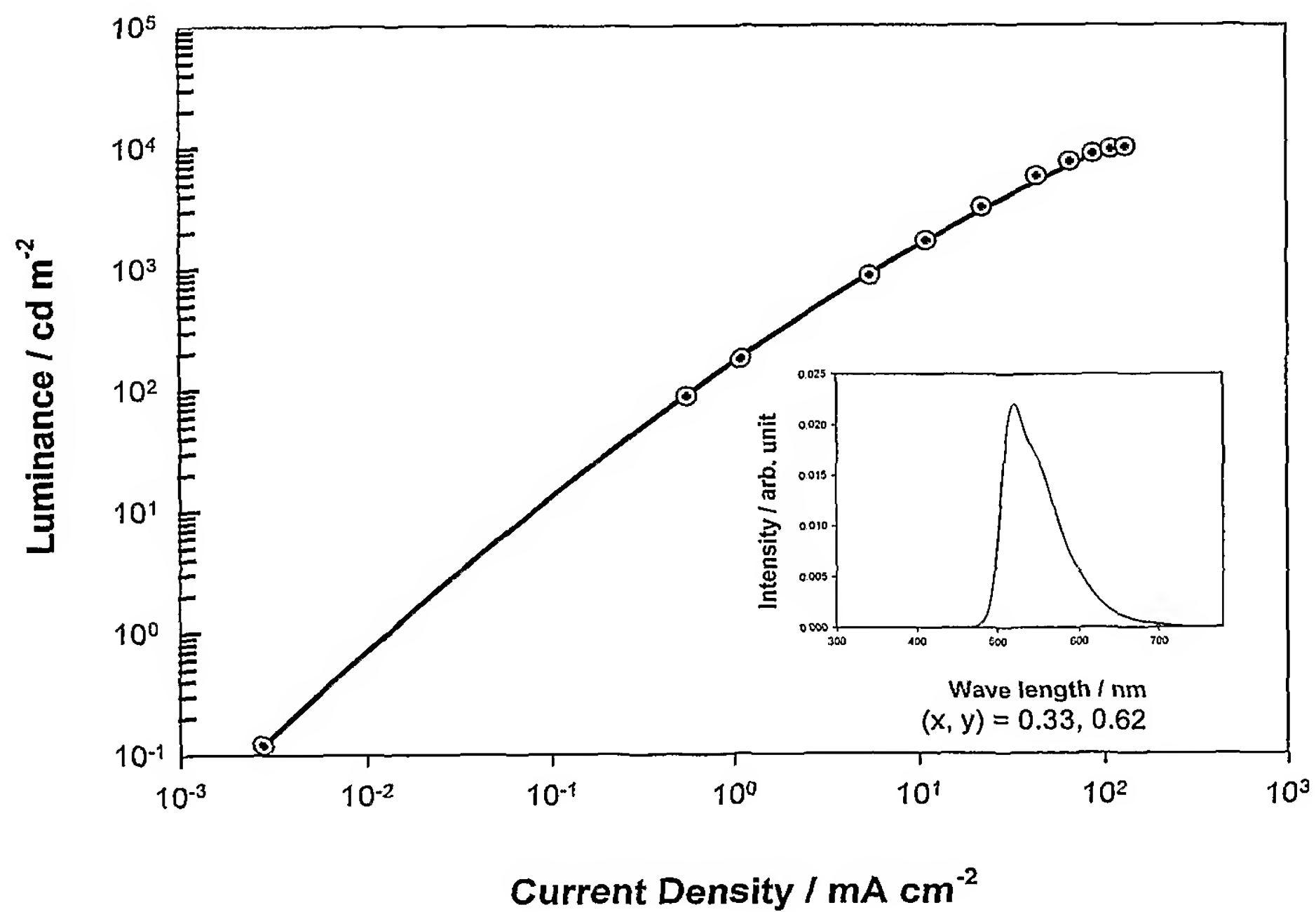


Fig. 13b

18/26

ITO (165 nm)/ $\alpha$ -NPB (40 nm)/CBP : Compound D (20 : 7 nm)/BCP (10 nm)/Zr<sub>q</sub>4 (50 nm)/LiF (0.5 nm)/Al

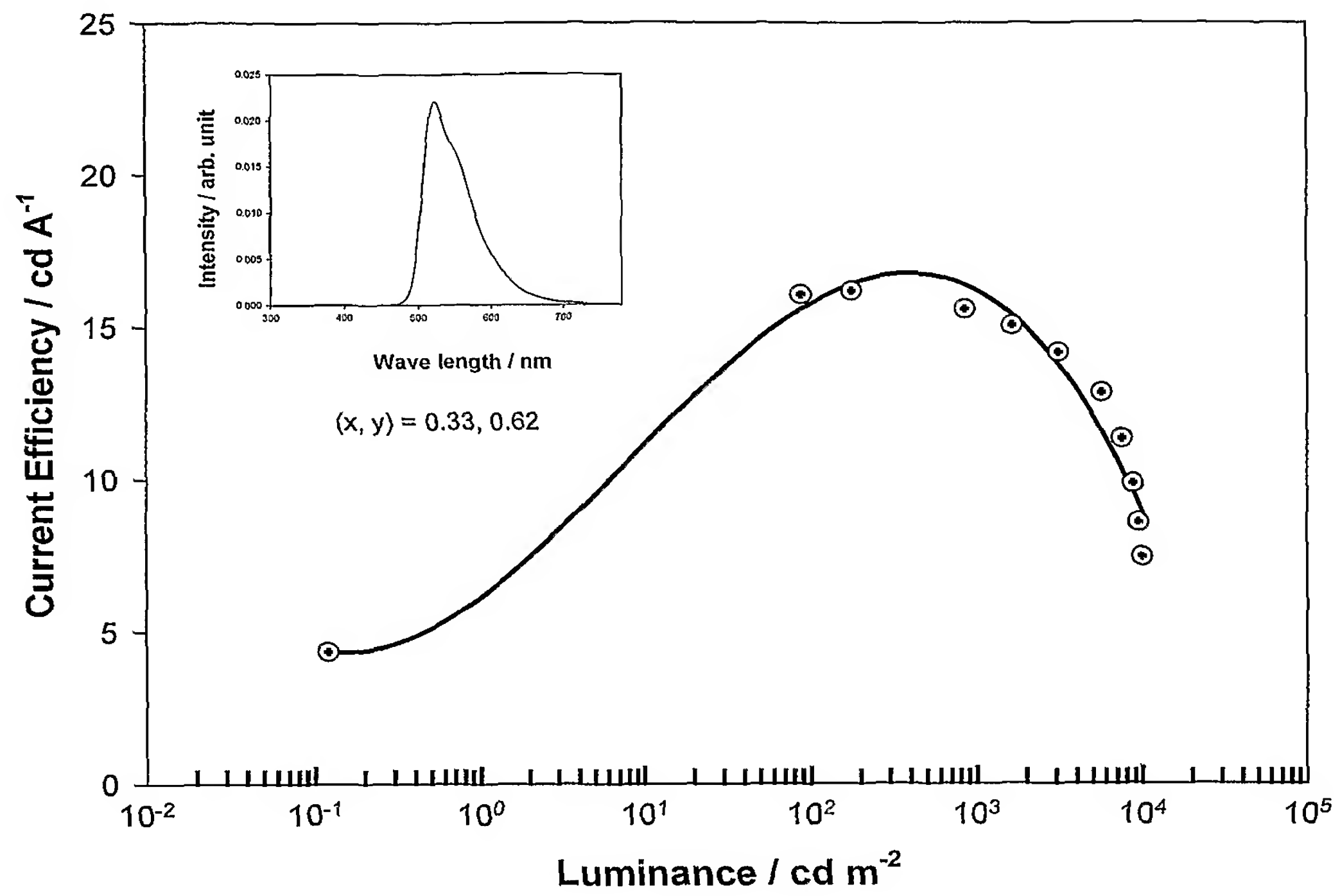


Fig. 13c

19/26

ITO (165 nm)/CuPc (25 nm)/ $\alpha$ -NPB (40 nm)/TCTA : Compound C (40 : 0.8 nm)/Liq (30 nm)/LiF (0.5 nm)/Al

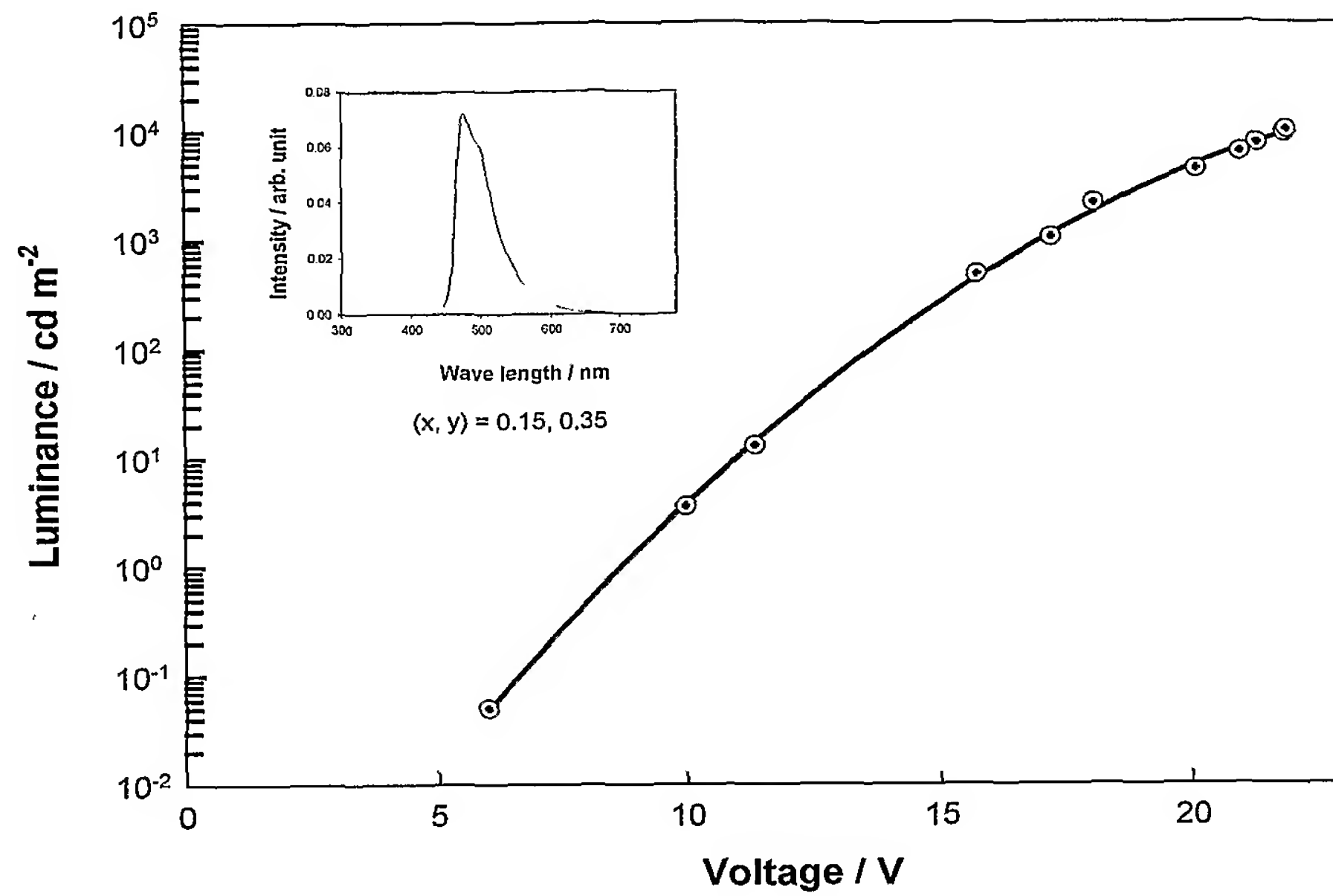


Fig. 14a

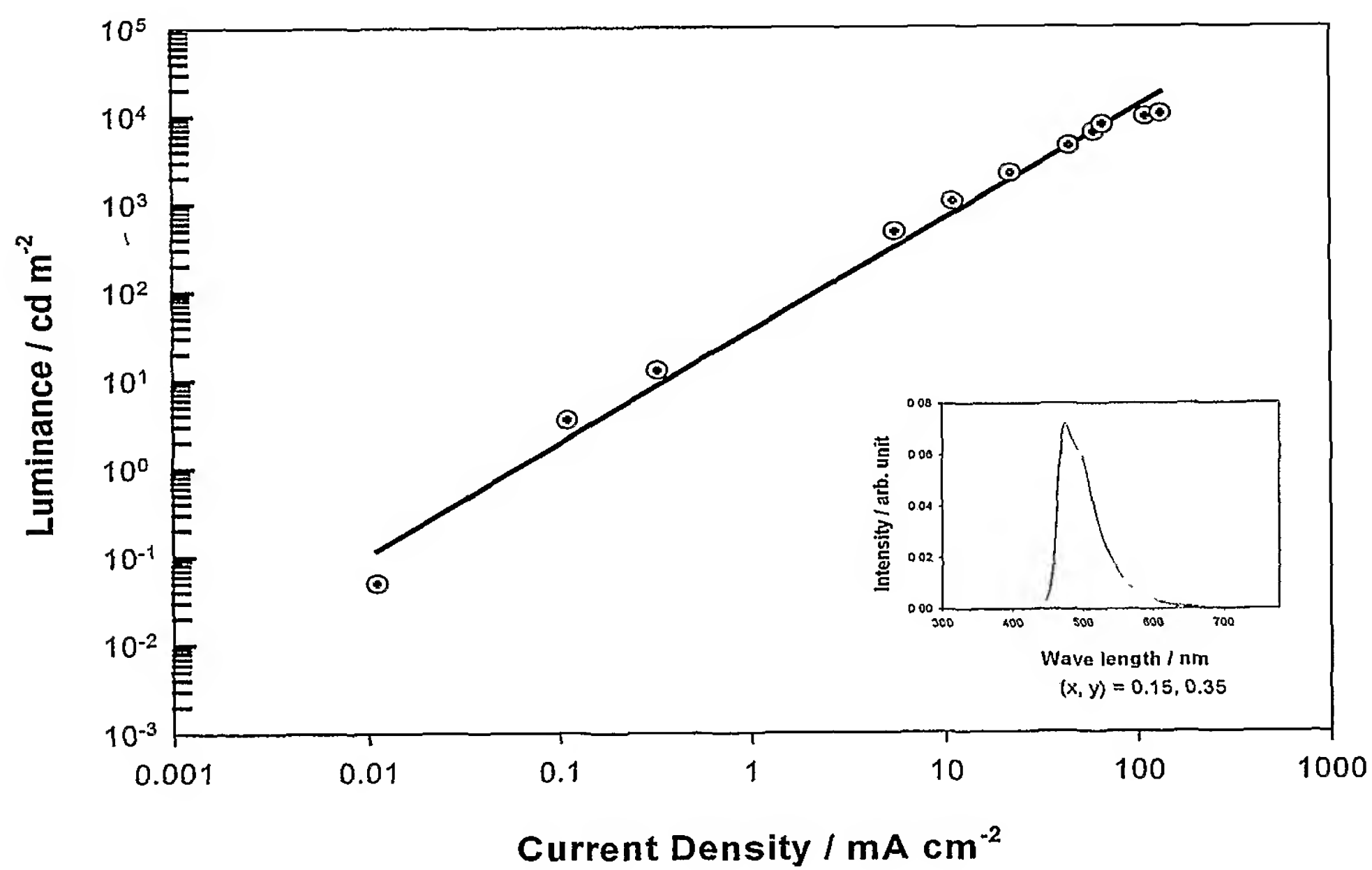


Fig. 14b

20/26

ITO (165 nm)/CuPc (25 nm)/ $\alpha$ -NPB (40 nm)/TCTA : Compound C (40 : 0.8 nm)/Liq (30 nm)/LiF (0.5 nm)/Al

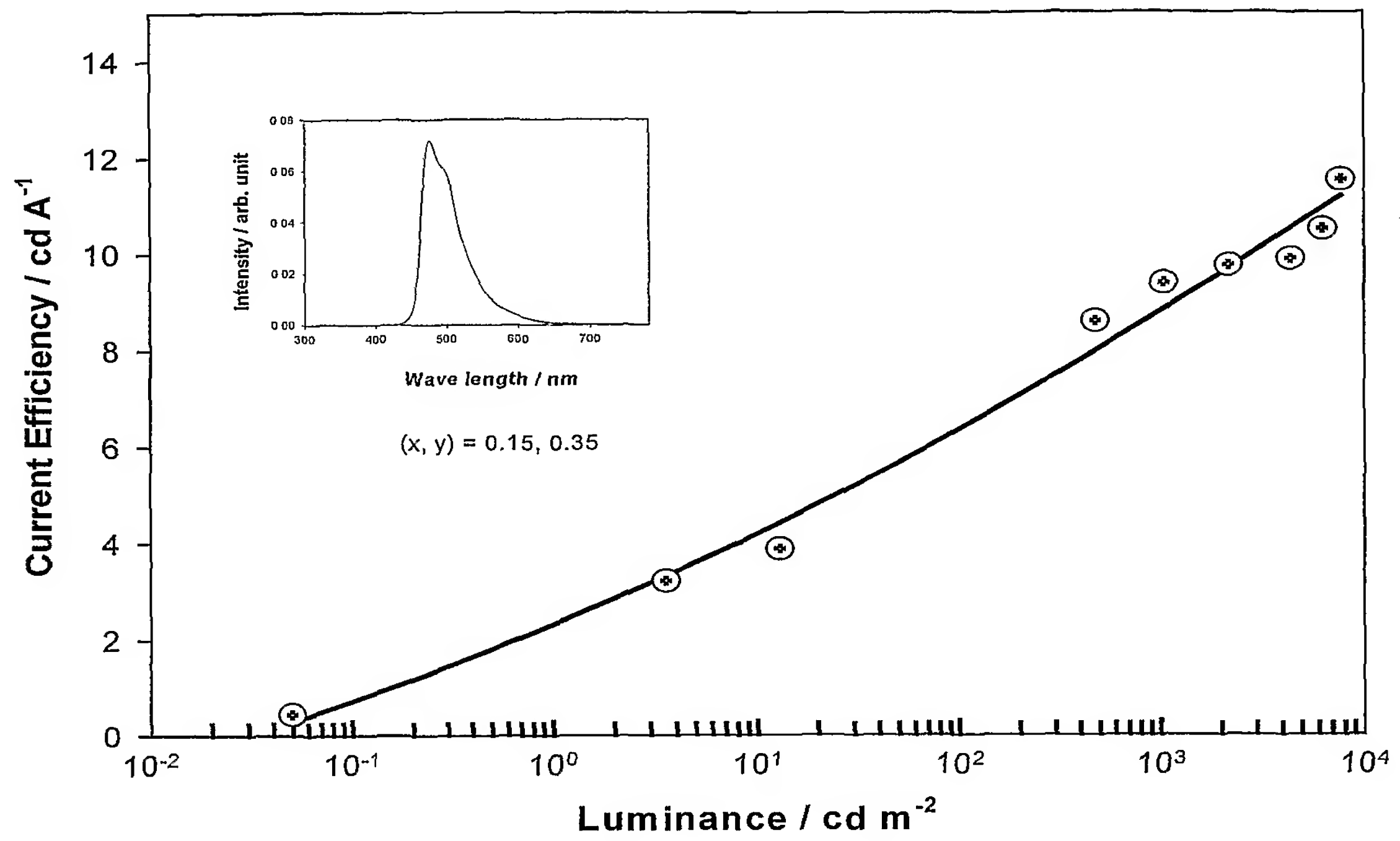


Fig. 14c

21/26

ITO (165 nm)/ $\alpha$ -NPB (40 nm)/CBP : Compound D (20 : 8.3 nm)/  
Compound F (10 nm)/Zr<sub>q</sub>4 (50 nm)/LiF (0.5 nm)/Al

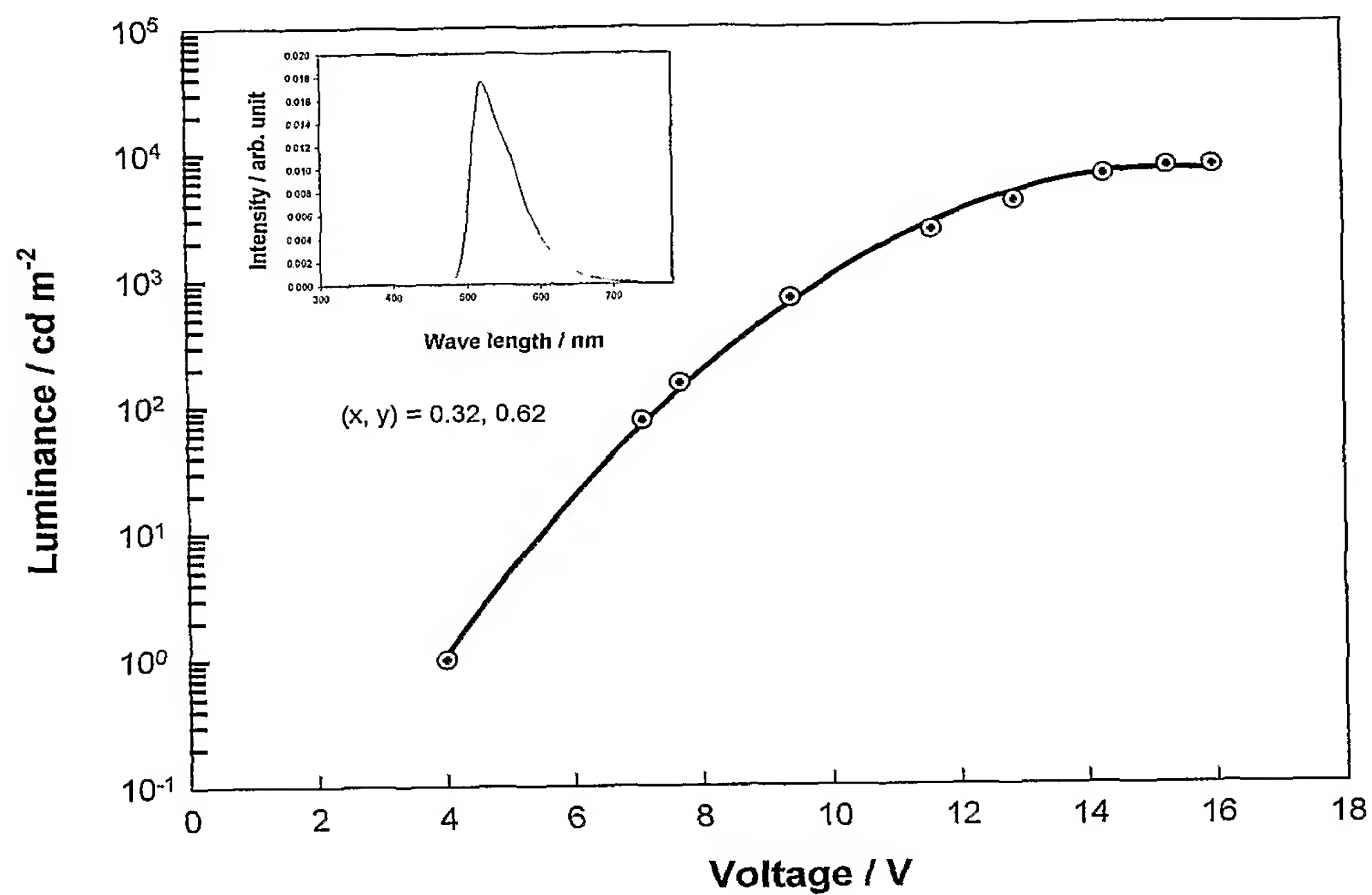


Fig. 15a

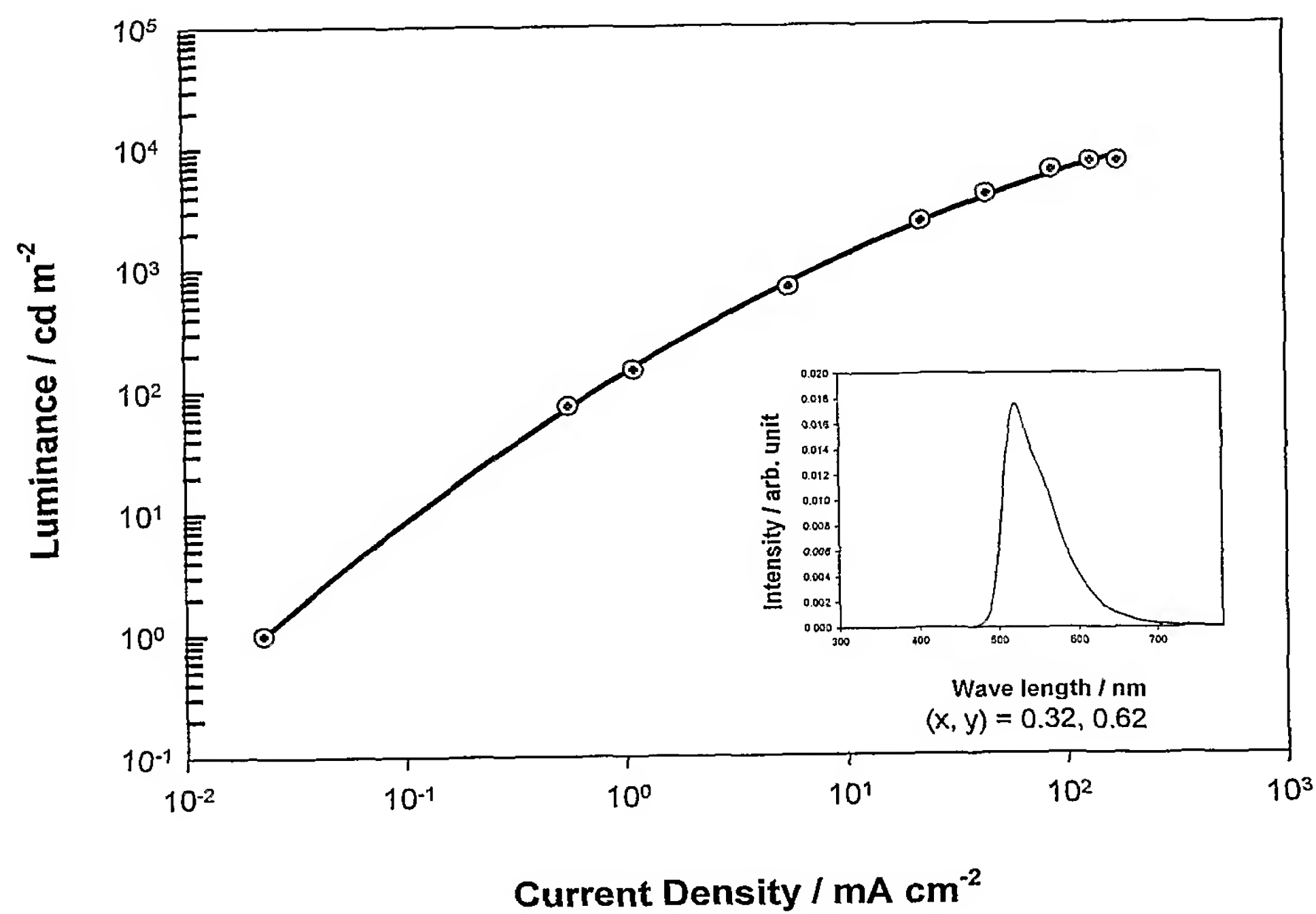


Fig. 15b

22/26

ITO (165 nm)/ $\alpha$ -NPB (40 nm)/CBP : Compound D (20 : 8.3 nm)/  
Compound F (10 nm)/Zr<sub>q</sub>4 (50 nm)/LiF (0.5 nm)/Al

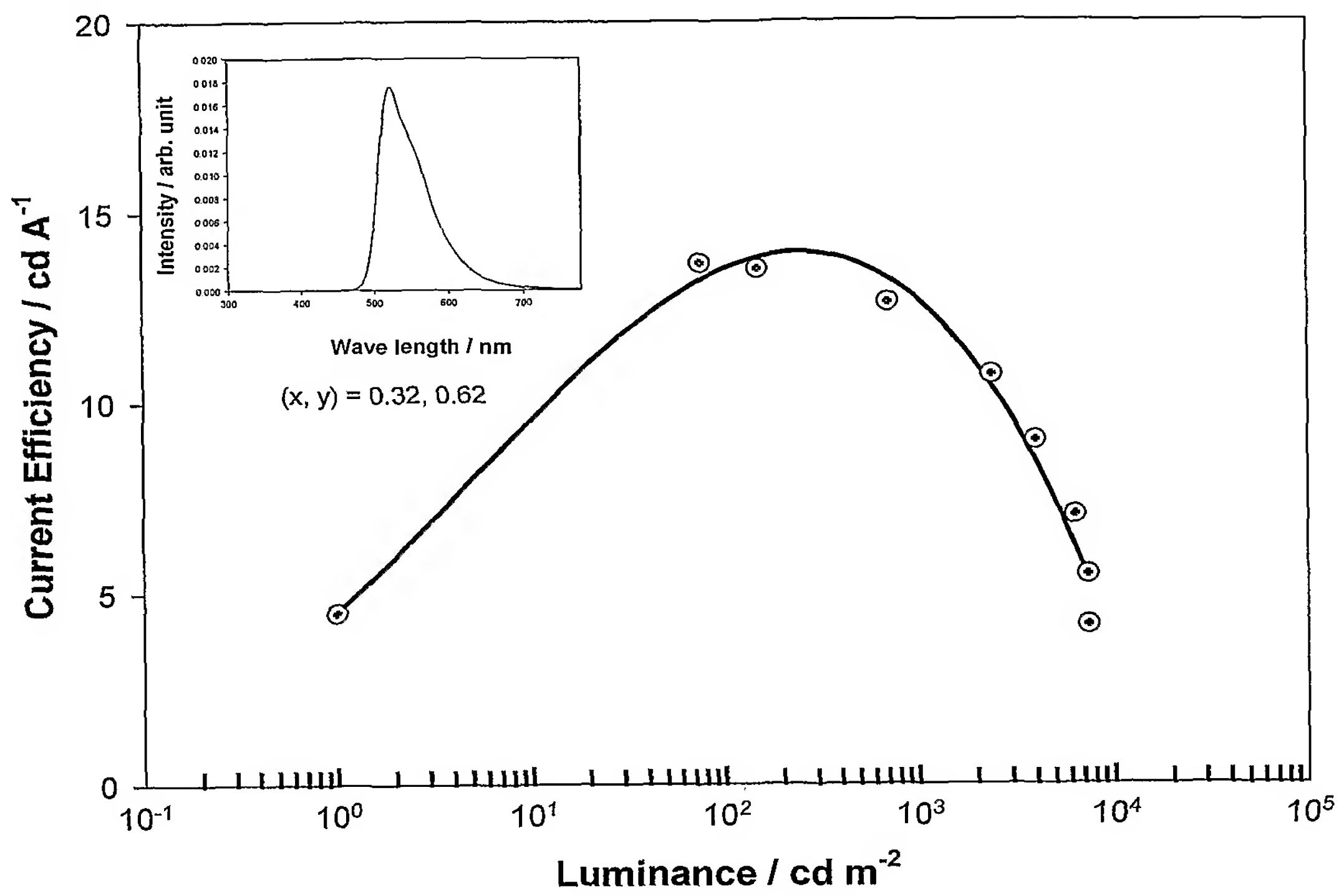


Fig. 15c

23/26

ITO (165 nm)/CuPc (25 nm)/ $\alpha$ -NPB (40 nm)/CBP : Compound E (35 : 5 nm)/Zr<sub>q</sub> (30 nm)/LiF (0.5 nm)/Al

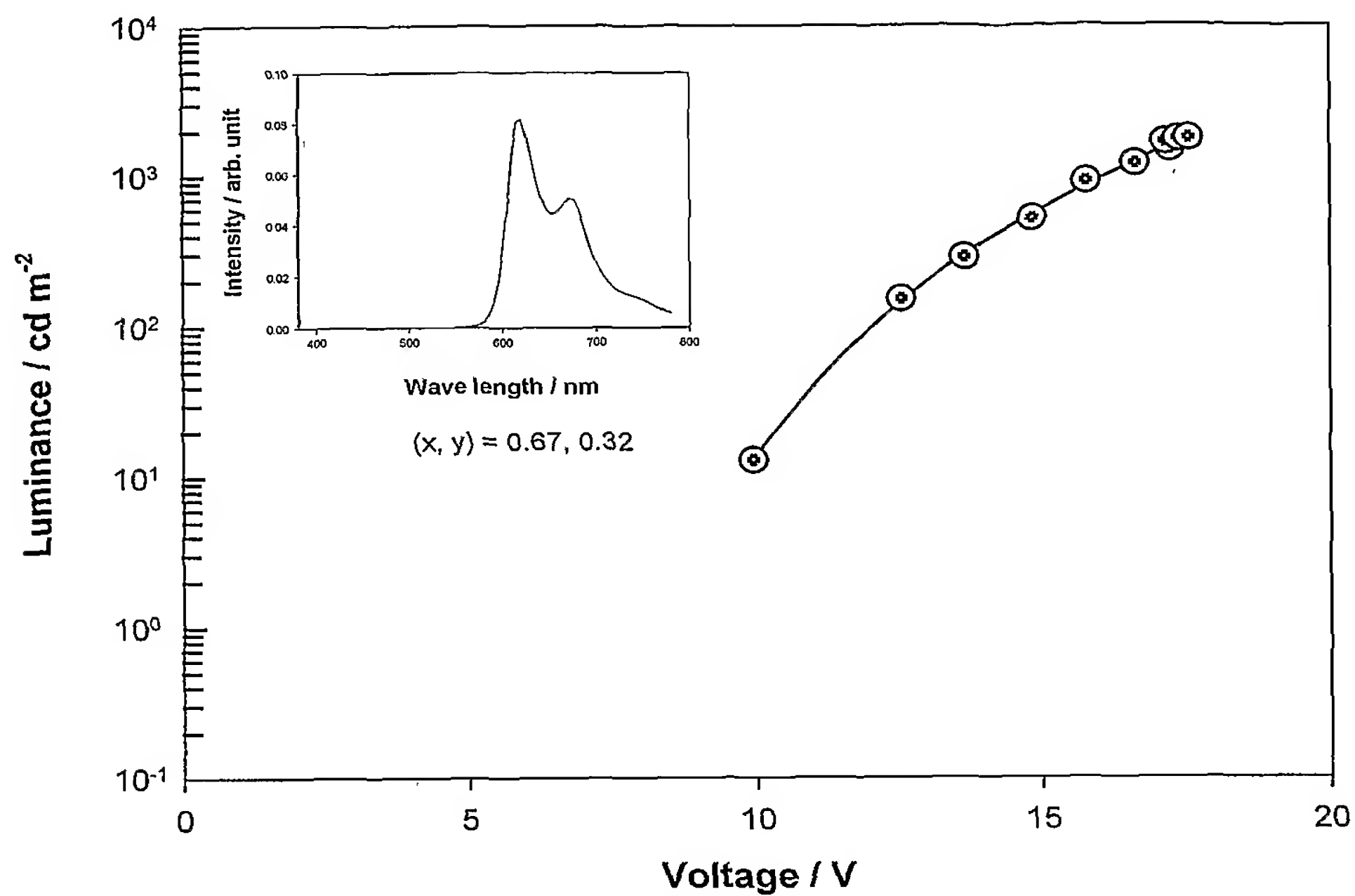


Fig. 16a

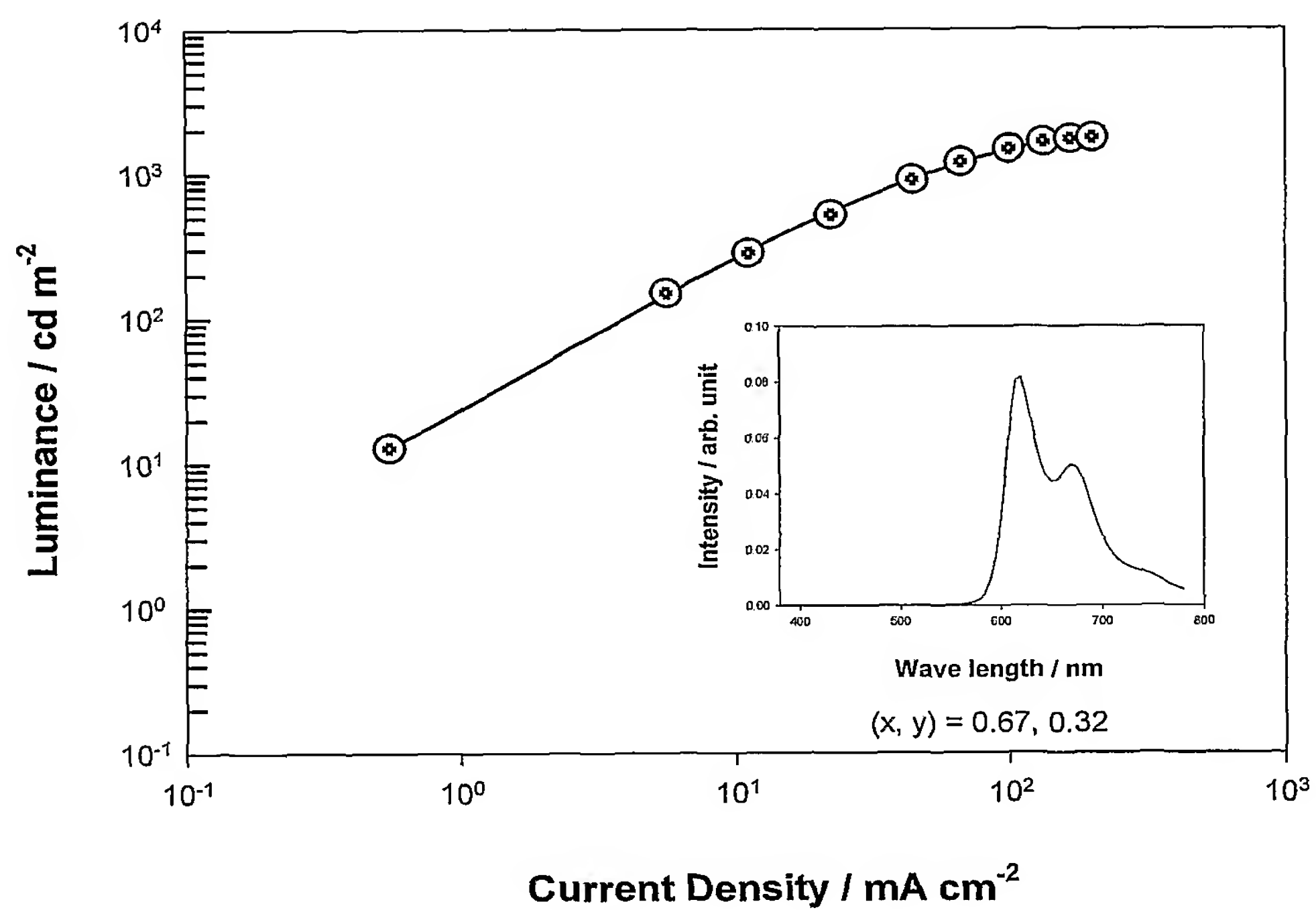


Fig. 16b

24/26

ITO (165 nm)/CuPc (25 nm)/  $\alpha$ -NPB (40 nm)/CBP : Compound E (35 : 5 nm)/Zr<sub>q</sub> (30 nm)/LiF (0.5 nm)/Al

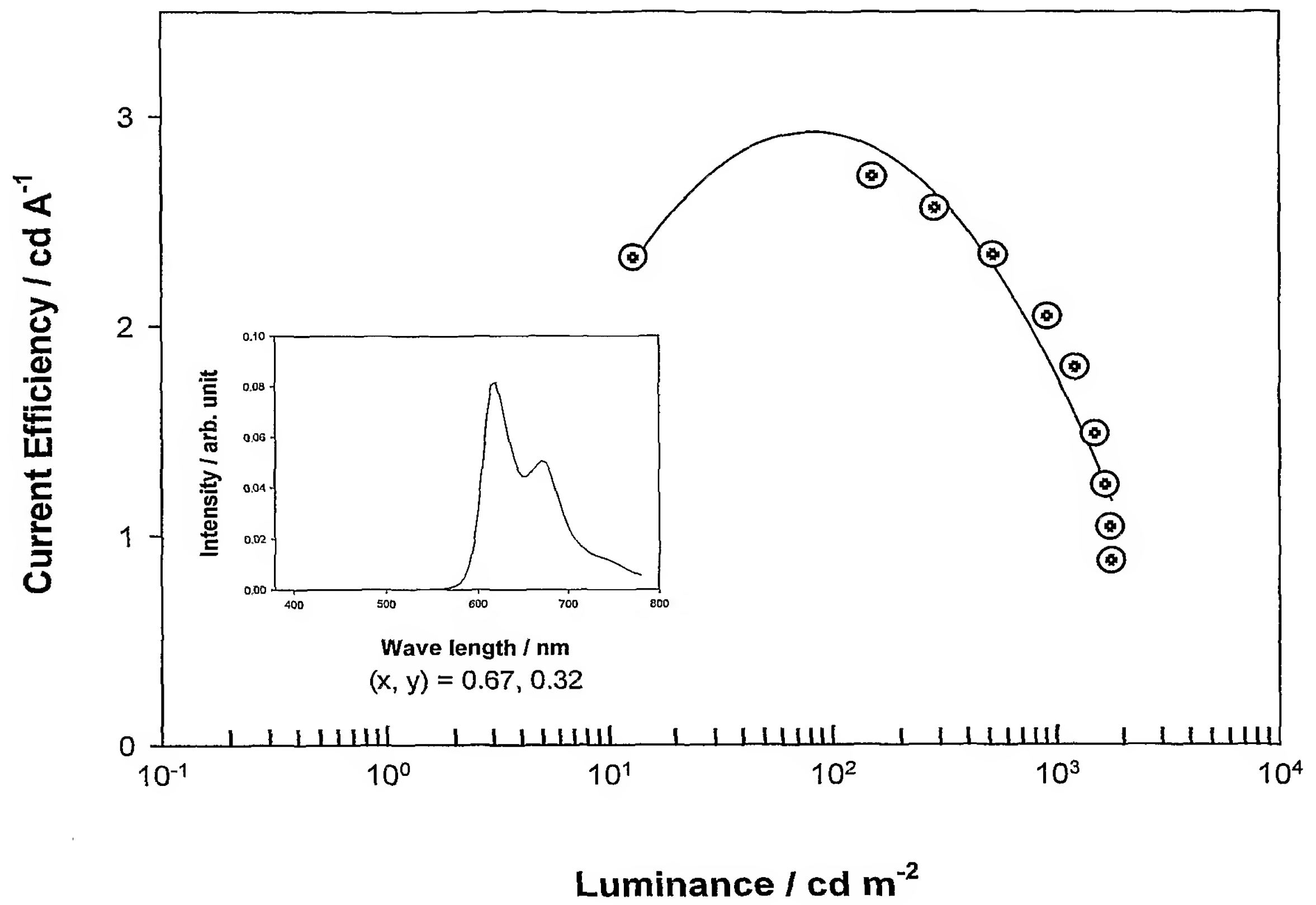


Fig. 16c



25/26

ITO (165 nm)/CuPc (50 nm)/  $\alpha$ -NPB (40 nm)/CBP : Compound D (20 : 6.1 nm)/Compound F (10 nm)/Zr<sub>q</sub>4 (50 nm)/LiF (0.5 nm)/Al

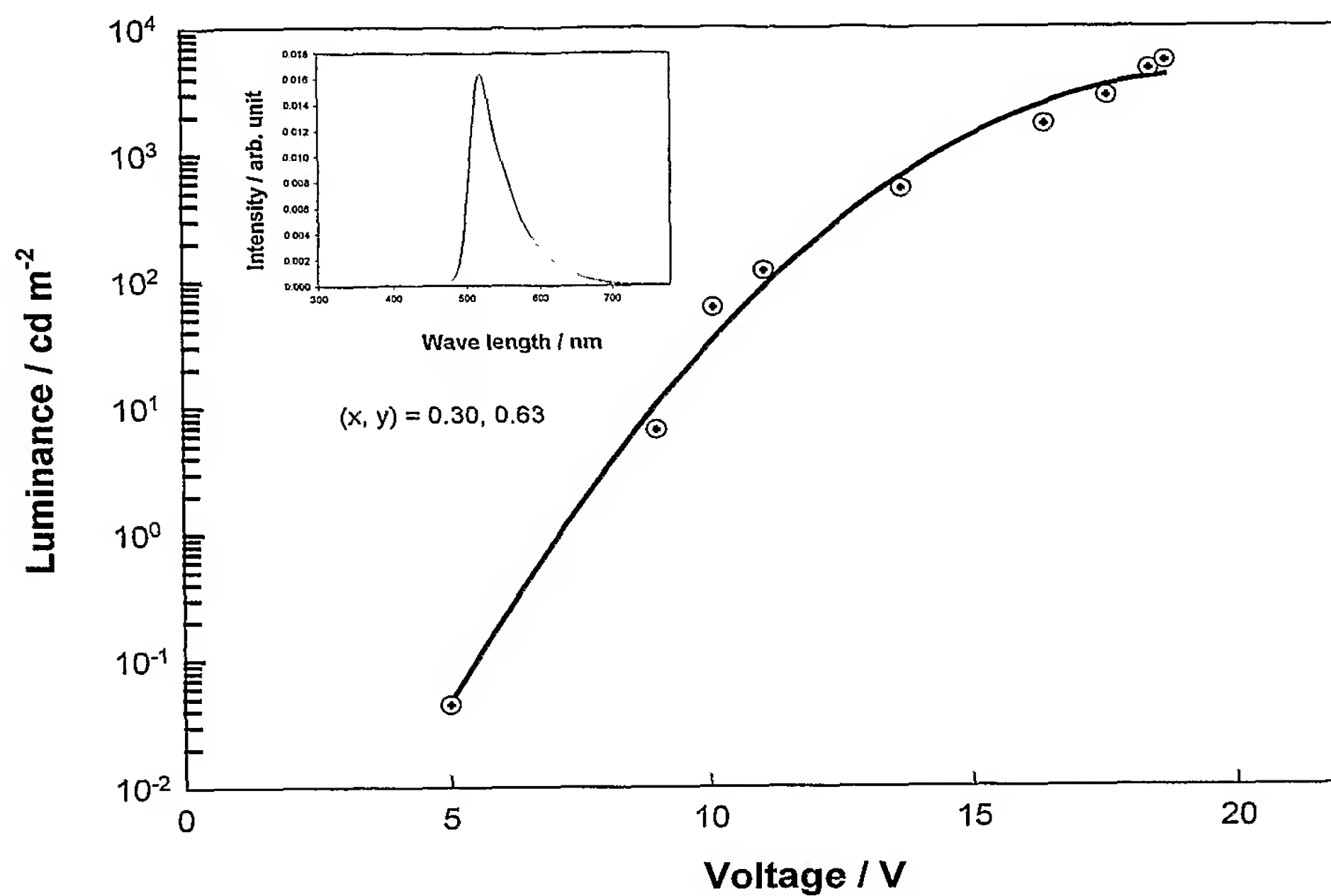


Fig. 17a

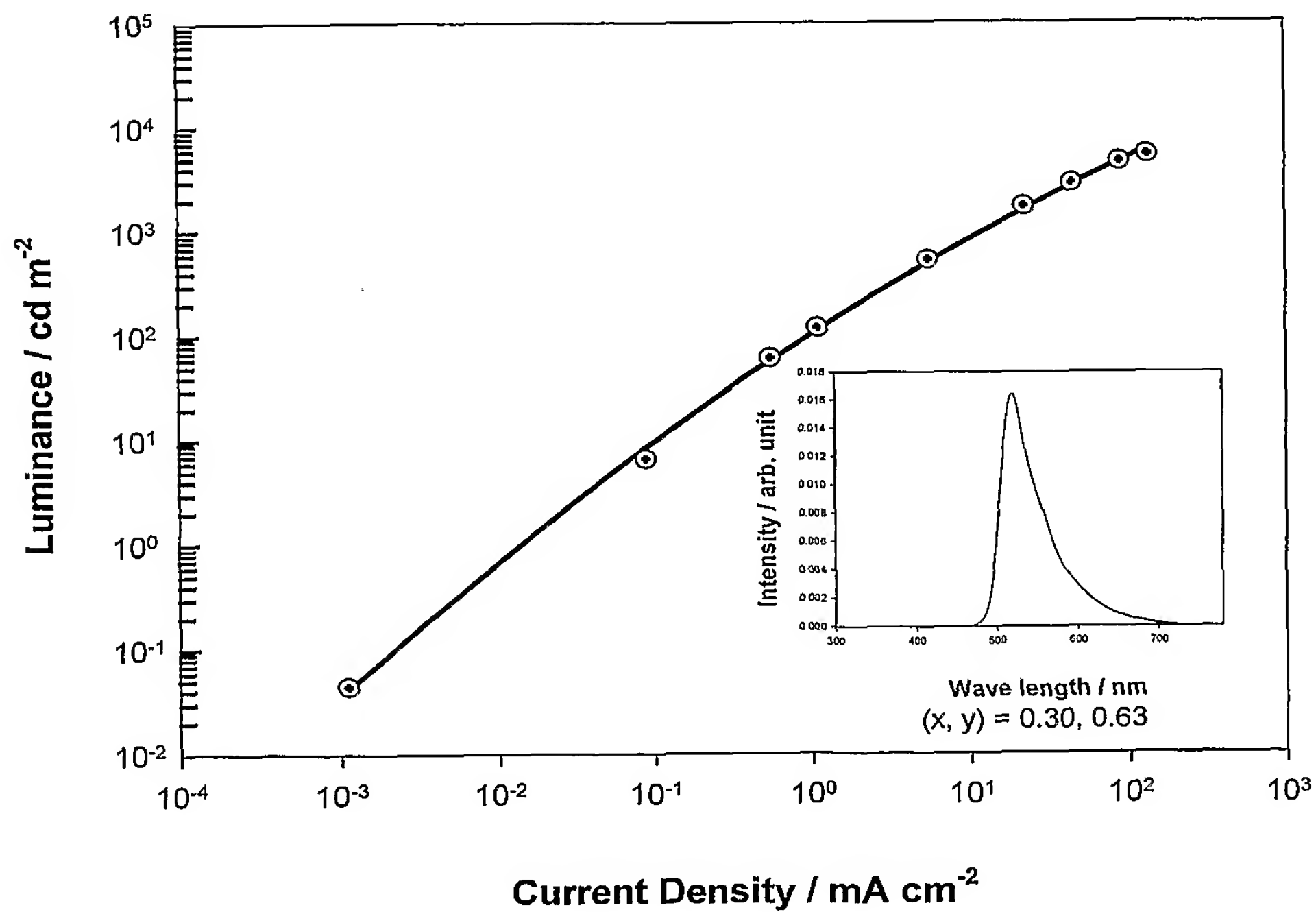


Fig. 17b

26/26

ITO (165 nm)/CuPc (50 nm)/  $\alpha$ -NPB (40 nm)/CBP : Compound D (20 : 6.1 nm)/Compound F (10 nm)/Zr<sub>q</sub>4 (50 nm)/LiF (0.5 nm)/Al

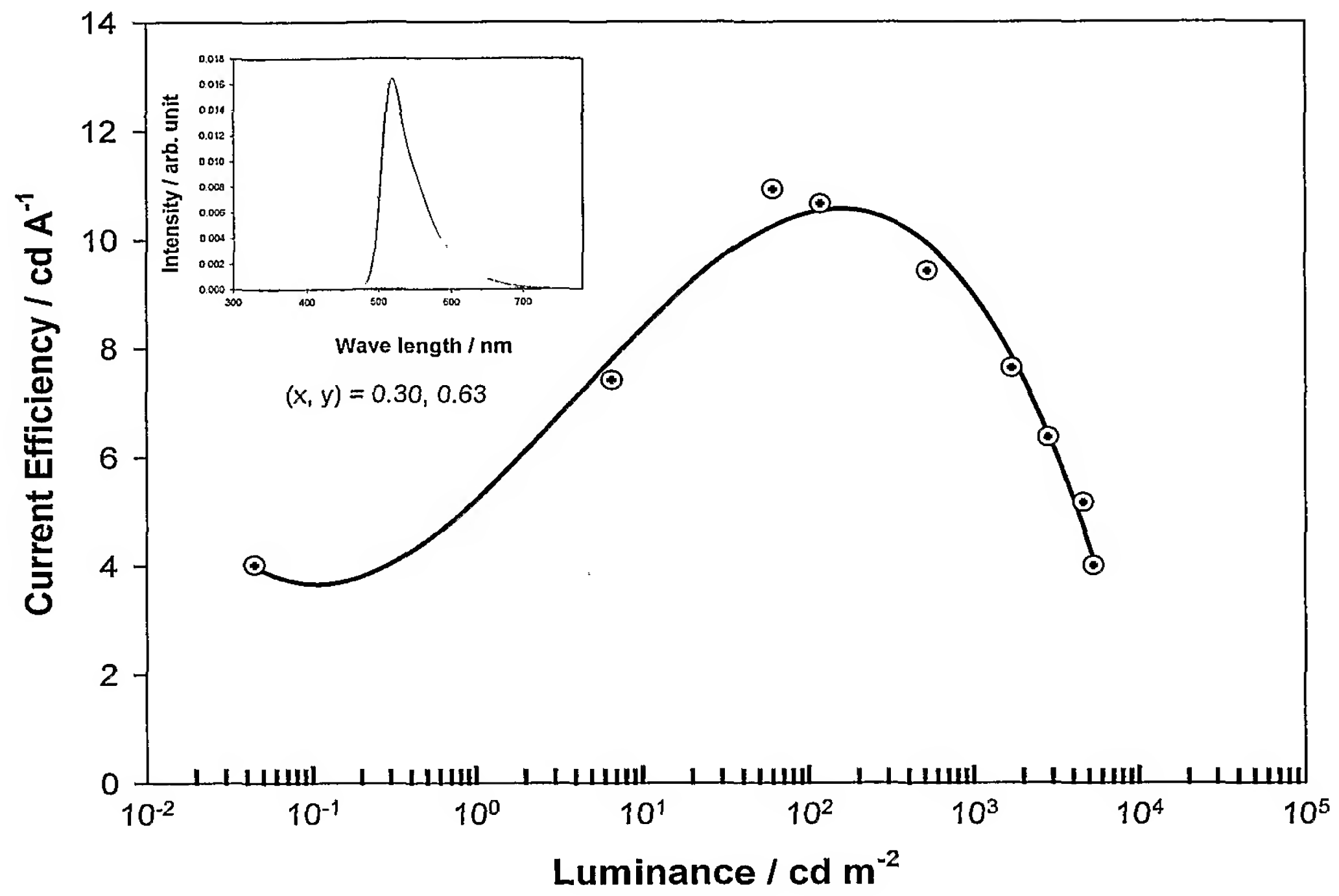


Fig. 17c